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Procurement and Contract Services Section

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Barton, Murray, Magnolia, and North Beach Combined Sewer Overflow Facilities RFP No. E00022E06 ADDENDUM NO. 1

Proposers are hereby notified that the document of said Request for Proposals has been amended as hereinafter set forth:

Ref	Page	Location and Description of Change
1-1	19	VII. DOCUMENTATION. B.2. Delete the sentence and Replace with the following: 2. Submittal shall be limited to a maximum of thirteen (13) pages, including:
1-2	20	VII. DOCUMENTATION. B.4 Delete the third sentence that begins with "If rejecting proposals..." and Replace with the following: "If rejecting proposals that exceed the page count results in only two (2) conforming proposals, the County at its sole discretion will remove pages to bring the non-conforming proposals within the page count limit."
1-3	Scope of Work	Delete Attachment 1, Scope of Work, in its entirety and Replace with the revised Scope of Work, attached as Addendum No. 1, Attachment 1. Changes in the revised Scope of Work are indicated by underlining for additions and strike-through marking for deletions. (Revisions made to Tasks 210, 250, 310, 325, 350, 410, 425, 450, 510, 525 and 550)
1-4	Attachment 3 WorkPlan/LOE & Project Schedule	ATTACHMENT 3-WORKPLAN/LOE & PROJECT SCHEDULE WorkPlan/LOE – Delete in its entirety and Replace with the WorkPlan/LOE included as Addendum No. 1, Attachment 3. Proposers must download and use the WorkPlan/LOE posted on the County's website as of the date of this Addendum No. 1. The electronic version of the WorkPlan/LOE can be found at: http://www.metrokc.gov/procurement/rfpdocs/2006/May/Consultants/E00022E06/E00022E06_ad1_loe.xls .

This Addendum No. 1 shall form a part of the Request for Proposals document.

Date: June 12, 2006

Issued by:


Frances Gaudin
Contract Specialist

ATTACHMENT 1

Barton, Murray, Magnolia, and North Beach CSO Projects

PREDESIGN SCOPE OF WORK

Under this contract, the consultant will provide predesign engineering and project-related services for the Barton, Murray, Magnolia, and North Beach Combined Sewer Overflow (CSO) facilities. The North Beach work will also investigate upgrading the existing pump station and forcemain. King County (county) is obtaining Washington State Revolving Fund money for the Barton, Murray, and North Beach projects. The Magnolia project will not receive any state funding. There is no federal money involved in these projects. The county will not amend this contract for final design and construction services. The county will conduct new separate contract procurements for those phases for each CSO facility.

The prime consultant on this contract shall not be on the project team (either as a prime or a subconsultant) for the final design and shall assume that it will not be able to participate in construction management services contracts that may result from the projects in this contract. Depending on the outcome of the predesign and final design, King County may reconsider a prime's ability to participate in construction management services. The County will evaluate the role of subconsultants that participate on this contract to determine if participating in final design and/or construction management services would create a conflict of interest or unfair competitive advantage in competing for future design work and/or construction management services.

A general outline of the overall project scope of work is presented below. The final detailed predesign scope will be developed as part of contract negotiations.

Establishment of good working relationships with county staff shall be required. The consultant shall identify and resolve issues in a timely manner, communicate effectively, and ensure the accuracy and overall quality of the work and work products. The consultant bears the full responsibility for delivering coordinated, integrated, and reviewed deliverables to the county.

PREDESIGN

Task 100 Project Management

This task includes all work related to the management, administration, and coordination of consultant activities throughout the duration of this contract. It is anticipated the predesign phase will last 27 months. Specific activities shall include the following:

- 1. Project Plan.** Submit a draft project plan within 21 days of notice to proceed (NTP) for county review, incorporate county review comments, and submit a final project plan within 45 days of NTP. Update the plan semi-annually through the duration of the project. The project plan will include scope, work plan and products, organization and staffing, contract schedule, plan for permitting and property rights acquisition (including potential appeals or condemnation), communication mechanisms, QA/QC plan, and detailed contract budget.
- 2. Contract Schedule.** Prepare a detailed schedule of contract activities, updated semi-annually through the duration of the project. Plan and provide adequate resources to assure schedule requirements are met. Schedule requirements shall incorporate both internal and external milestones.

3. **Cost Control/Progress Reporting.** Manage the subconsultants and the contract budget. Prepare monthly project status reports (up to 27) that compare work accomplished with schedule activities and compare expenditures with task budgets. Documentation will include details of expenditures on each task and will show the hours worked by project personnel and other direct expenses related to the task.
4. **Project Meetings.** Attend meetings including one four-hour contract kick-off meeting and up to 60 two-hour bi-weekly coordination meetings. The consultant will prepare meeting notes of all meetings for comment and review, and revise and distribute by email, as appropriate.
5. **Agency Coordination.** Coordinate work efforts between the consultant team and other agencies that may become involved in the project. All liaisons with the county will be through the county's project representative. The county intends to work closely with the City of Seattle, State of Washington, and appropriate federal agencies until the completion of the project.
6. **Contract Decision Log.** Create and maintain a decision log documenting all significant decisions relating to the contract scope, schedule, and budget. This is a separate document from the Facility Plan.

Deliverables:

- a. Project plan with updates.
- b. Contract schedule with updates.
- c. Monthly progress reports (up to 27).
- d. Attend one four-hour contract kick-off meeting; 60 two-hour bi-weekly project coordination meetings, and distribute copies of meeting notes and action items. Incorporate county comments.
- e. Contract decision log – one hard copy and one electronic copy on compact disk.

BARTON CSO PROJECT

Task 200 Barton CSO Flow Analysis

Under this task, the consultant shall perform the following work:

1. **Barton CSO Flow Analysis.** The county will calibrate recently collected flow data and incorporate it to the flow model to perform additional CSO flow analysis for the Barton CSO facility and will determine the size of the Barton CSO facility. The consultant shall work with the county's flow modeling group. Review the county's CSO flow analysis, peak flows estimates, and CSO facility size determinations
2. **Assess Impacts of Global Warming.** Assess the potential impacts of global warming on the sizing, hydraulics, and location of the CSO facility. This would include the effects global warming has on rainfall and on rising sea levels.
3. **Project Team Meeting.** Hold up to two two-hour meetings with the county and others to discuss the county's CSO flow analysis, CSO facility capacity sizing, and an overview of the proposed Barton CSO facility.

Deliverables:

- a. Attend up to two two-hour meetings. Distribute meeting notes and action items.

Task 205 Barton CSO Project Alternative Development and Siting Evaluation

CSO Facility Development and Siting Evaluation. For the Barton CSO facility, develop project alternatives and alternative facility sites. Alternatives shall include storage and other improvements in the drainage basin. Conduct an evaluation to identify and select a preferred CSO facility and site. Storage options would include both off-line and in-line CSO facilities. If

requested by the county, evaluate improvements to existing Barton wastewater facilities and the impacts to the Barton CSO facility. Prepare a report describing the alternative facility and siting development process along with the development of criteria and assessment of each alternative against the criteria. This assessment will lead to the selection of a preferred Barton CSO facility and site. The evaluation shall include the ability to: 1) minimize public impacts in acquiring property; 2) identify and secure initial permits and access rights for studies, as well as identifying all permanent property rights and permits to acquire; 3) minimize public impacts during construction and operation; 4) minimize environmental impacts; 5) minimize constructability impacts; 6) meet CSO program requirements; 7) estimate costs for land and easement acquisition; 8) address engineering issues, including geotechnical; and 9) minimize total life cycle costs. Prior to starting this work, the county will have worked with the community and developed policy siting criteria (community, technical, environmental, financial), detailed evaluation questions, and key factors (community, environmental, and engineering) to guide the siting process.

1. **Alternative Selection Workshops.** Conduct up to three four-hour workshops with the county, public agencies, community stakeholders, and other interested parties to discuss and obtain input on alternatives.
2. **Planning Level Total Life Cycle Cost Estimates.** Provide planning level total life cycle cost estimates for the alternatives and the preferred CSO facility at each project location.
3. **Prepare a Siting Report detailing the work under this task.**

Deliverables:

- a. Draft and final siting report for CSO facility development and site selection, including total life cycle cost estimates. Provide one bound hard copy, one unbound hard copy, and one electronic copy on compact disk, pdf format.
- b. Conduct three four-hour workshops and prepare notes of workshops.

Task 210 Barton Environmental Compliance

The county is the designated State Environmental Policy Act (SEPA) lead agency for this project. The county will determine and conduct the appropriate environmental review, issue a project SEPA Threshold Determination, and release required notices and documents. The consultant will be required to provide services as necessary for the environmental review process and, if needed, the Endangered Species Act (ESA) Section 7 review process. The county is obtaining Washington State Water Pollution Control Revolving Fund (SRF) money for this project. This funding will require the county to produce a Facility Plan. In order for the Facility Plan to be approved by the State of Washington, the requirements of the State Environmental Review Process (SERP) must be completed. To complete SERP, the county must receive the Washington State Department of Ecology's (DOE) concurrence on all SEPA documents and the Environmental Information Document (EID). Services may include, but not be limited to, the following:

1. **Environmental Condition Assessments.** Identify existing environmental conditions, including regulatory conditions that may influence siting, construction, or operation. Identify potential adverse impacts upon the environment from the project and recommend appropriate mitigation measures. Environmental elements and issues may include wetlands, fisheries, noise, vegetation, traffic, and water quality, among others.
2. **Environmental Documentation.** Generate a memo documenting existing environmental conditions, potential environmental impacts, and mitigation measures. This documentation could be used to evaluate the feasibility of the preferred CSO facility site and support the SEPA review.
3. **Attend Meetings.** Attend up to four two-hour meetings with the county's Wastewater Treatment Division (WTD) and regulatory agencies, as directed.

4. **ESA Evaluation.** Assess potential for ESA Section 7 review of project elements by location and, if feasible, propose project modifications that could avoid the need for this review.
5. **ESA Documentation.** Prepare biological evaluation, biological assessment, or other documents to allow compliance with ESA, if required.
6. **Environmental Information Document.** Provide services for completing the EID, including the Contact Source list, Initial Letter, Level of Assessment form, the Environmental Report (ER), and Agency Tracking Checklist.
7. **SERP and SEPA.** Provide services for completing SERP and SEPA.
8. **Phases I and II Environmental Assessments.** Perform Phase I Environmental Site Assessment in accordance with ASTM E 1527-05 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, to determine whether recognized environmental conditions are present at the preferred CSO facility sites. Conduct Phase II Environmental Assessment, if requested by the County.

Deliverables:

- a. Technical memorandum identifying existing conditions, potential impacts upon the environment, and recommended mitigation measures.
- b. Reports for the SEPA review. Assume five reports at 20 pages each.
- c. Attend four two-hour meetings with WTD and regulatory agencies, if needed.
- d. Meeting notes and action items.
- e. Report documenting ESA compliance, if required.
- f. Phases I and II Environmental Assessment reports.
- g. Environmental Information Document.

Task 215 Barton Permit Services

The county will procure permits for the project. The county will gather and summarize information on local, state, and federal permit requirements that may be used to evaluate the feasibility of CSO facility site alternatives. The county cannot make formal application for most permits until the project is in the 30 percent design level. During the predesign phase, the consultant's participation in permit services may include the tasks listed below.

1. **Permit Meetings.** Attend and/or provide services, if required, for up to six two-hour meetings with other agencies, which are arranged by the county to present project sites and receive agency comments. Prepare presentation materials as necessary for these meetings. Assume up to three boards and six drawings or sketches.
2. **Permit Identification.** After the preferred CSO facility sites have been defined, prepare a spreadsheet matrix listing all permits and agreements required for this project. Include statutory authority, submittal requirements, review process/schedule, and appeal procedures if applicable.
3. **Permit Application Documents.** Provide services to the county in starting to prepare local, state, and federal permit applications, project narratives, and drawings, as well as responses to initial agency comments or requests for information, and provide needed revisions to applicable plans. Provide permit support for any required Section 404/401 applications using the Joint Aquatic Resource Permit Application (JARPA). Assume 10 draft permit applications.
4. **Permit Required Property Rights.** Provide coordination services to the county for property rights for specific permit applications.

Deliverables:

- a. Prepare documentation for initial permit applications, and respond to questions from permitting agencies in writing. The county will review response and submit updated versions to permit agencies. Assume 10 draft permit applications.
- b. Provide any needed wetland and wetland buffer delineation, wetland reports, sensitive areas mapping, or geological reports needed for permit submittals.
- c. Prepare for and attend six two-hour meetings with county and other permit agencies.
- d. Presentation materials: three boards and six drawings or sketches for meetings and facilitate meeting, if needed.
- e. Meeting notes and action items.

Task 220 Barton Community Relations

The county's community relations staff will lead this effort for this contract. In addition, county staff will:

- maintain Web site,
- develop and issue all news releases (if needed), and
- coordinate communications with the local jurisdictions.

The county will cover costs of mailing or delivery of fliers and meeting rooms (to be direct-billed to the county).

The county graphics department, print shop, and sign shop will be used as needed.

The consultant's participation in community relations services may include the tasks listed below. All written materials and communications products are to be reviewed and approved by the county:

1. **Community Relations Plan (CRP).** Participate in developing a community relations plan in accordance with county public involvement guidelines. Identify target audiences, potential issues and concerns, and ways to inform and involve the community in the project. It will be updated as the project progresses.
2. **Community Issues Analysis.** Compile information that could be used to evaluate the feasibility of the preferred CSO facility sites. Coordinate the development of a community issues/input matrix to document and track public input.
3. **Attend Meetings.** Attend up to six two-hour meetings with the county project team as requested.
4. **Stakeholder Workshops.** Participate in planning, organizing, and publicizing up to three four-hour stakeholder workshops. Prepare workshop materials, such as invitations, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend and facilitate workshops and prepare workshop summaries.
5. **24-hour Project Information Line.** Monitor information line during geotechnical work. Prepare log summarizing questions and responses.
6. **Community Meetings.** Participate in planning, organizing, and publicizing three four-hour community meetings. Prepare meeting materials, such as meeting announcements, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend meetings and prepare meeting summaries. If requested, facilitate the meetings.
7. **Community Briefings.** Participate in up to three two-hour community group briefings. Participate in the scheduling, preparation of briefing materials, attend briefings, and prepare written summaries. If requested, facilitate the briefings.
8. **Public Information Materials.** Draft, produce, and coordinate distribution of up to 10 informational pieces.

Deliverables:

- a. Draft and final community relations plan.

- b. Attend six two-hour meetings with county's project team.
- c. Prepare materials for and attend three four-hour stakeholder workshops. Provide workshop summaries.
- d. Prepare materials for and attend three four-hour community meetings. Provide meeting summaries.
- e. Prepare materials and summaries for up to three two-hour community briefings. Provide briefing summaries.
- f. Project informational pieces (up to 10). Assume one page each with information on both sides.

Task 225 Barton Geotechnical Investigations

Perform predesign level geotechnical investigation for the Barton CSO facility. The consultant shall coordinate with the WTD geotechnical guidelines and reporting requirements. The University of Washington (UW) geologic database shall also be used by the consultant. The consultant will provide the following services:

1. **Geotechnical Investigation.** Perform geotechnical investigation, including the research, acquisition, and review of existing available geotechnical, historical land use, photographs, and ground water data for projects completed at or in the vicinity of the alternatives and preferred sites for the Barton CSO facility. Conduct a field investigation of surface geology.
2. **Technical Memorandum.** Prepare a technical memorandum detailing the results of the investigation for county review. The memorandum shall include a general discussion of the geology in the project area, available boring logs, ground water conditions, descriptions of problems in the area; areas that should be avoided during preliminary design, and make preliminary recommendations for dewatering, for structures and pipelines. The report shall also recommend subsurface explorations for the preferred Barton CSO facility site.
3. **Boring Application Documents.** Prepare all necessary documents and plans showing the test pits and boring locations for the application of required soil boring work permits.
4. **Soil Borings.** Conduct a series of exploration borings, soil testing to characterize foundation conditions, and other engineering/construction conditions for structures, and pipelines of the preferred Barton CSO facility site. The subsurface exploration and testing shall be based on the recommendation identified during the geotechnical investigation and in compliance with WTD geotechnical guidelines and reporting requirements. Assume for purposes of the proposal response:
 - three borings for pipelines averaging 25 feet deep,
 - three borings for preferred CSO facility site averaging 50 feet deep, and
 - the boring logs shall use the **Metro Datum**.
5. **Geotechnical Analysis.** Perform detailed geotechnical analysis after borings are completed. Attend two two-hour meetings with the county to review the analysis.
6. **Predesign Geotechnical Report.** Prepare a predesign geotechnical report for county review and comment. The predesign geotechnical report shall include preliminary recommendations for foundations of selected structures and pipelines, backfilling requirements for structure excavation, surface restoration, trenchless requirements, slope stability measures, erosion control measures, dewatering requirements, and other necessary engineering criteria. The report will include a discussion of seismic requirements for facilities and trench support requirements. Attend up to two two-hour meeting with the county to review soil report recommendations.

Deliverables:

- a. Technical memorandum of initial geotechnical investigation results for review by the county. The county shall provide review comments and the consultant shall respond to the comments in writing.

- b. Plans showing test pits and boring locations for application of required permits for soil borings.
- c. Technical memorandum on subsurface exploration and testing for county review.
- d. Predesign Geotechnical report including all technical memorandum and plans. Provide draft report for county review and comment. Provide final report in both electronic and hard copy format.
- e. Attend four two-hour meetings with the county and meeting notes and action items.

Task 230 Barton Survey and Mapping

Fieldwork, survey, preliminary base mapping information, and related services will be needed for the alternative site analysis, preferred CSO facility site, pipelines, and predesign work. The consultant shall use the Metro Datum. Tasks may include, but are not limited to, the following:

1. **Survey.** Establish horizontal and vertical controls. Conduct ground survey to collect data for all above and below ground fixed objects including the locations of all existing utilities and their ground and invert elevations, when possible. Provide property surveys for acquisition documents needed for recording. If needed, identify and pothole utility conflicts. All survey data will be placed on the preliminary base mapping. The consultant shall use the Metro Datum.
2. **Base Map.** Prepare preliminary base maps at one-foot contour interval and showing property lines, all above ground structures, and underground utilities. These preliminary base maps will be used by the consultant for the alternative site analysis and Facility Plan. Additional survey and base mapping will be performed during the final design phase. The county will give the preliminary base maps produced during this predesign phase to the selected final design consultants for their use. Base maps shall use the Metro Datum. Base maps shall be at a scale of 1"=20' and shall be stamped by a Washington State registered surveyor.

Deliverables:

- a. Base maps stamped by a Washington State registered surveyor in AutoCAD format on compact disk and as hard copy.

Task 235 Barton CSO Facilities Plan

The consultant shall prepare a Facility Plan for the Barton CSO facility. The Facility Plan shall satisfy the requirements of federal rule 40 CRF 35 and state WAC 173-240-060 and 173-245-050.

1. **Meetings.** Participate with the county in conducting the following meetings as part of the predesign process:
 - 1.1 Facilitate one four-hour kick off workshop with the county's staff.
 - 1.2 Facilitate one four-hour O&M meeting with operation and maintenance staff to determine O&M preferences and to address O&M issues.
 - 1.3 Facilitate one four-hour meeting with county staff to identify potential design problems and design preferences
 - 1.4 Attend one two-hour productivity initiative meeting to evaluate the feasibility of potential cost saving measures.
 - 1.5 Facilitate one (1) – 4-hr summary workshop with county staff to present the findings and recommendations of the draft Facility Plan and to solicit comments.
2. **Predesign Analysis.** Prepare a Facility Plan for the Barton CSO facility, including the following elements:

- 2.1 Design criteria summarizing the performance requirements for mechanical and electrical equipment. Functional, space, and utility requirements for the CSO facility, including summary of design code requirements (code search) that impact the CSO facility configuration (Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, Washington State Energy Code, National Electric Code, local noise ordinances, and NFPA 820). Evaluation will establish seismic importance factor for the CSO facility. Prepare a Technical Memorandum describing this evaluation.
- 2.2 Hydraulic Design Parameters - Develop hydraulic design parameters. Make recommendations on the sizing of any pumping equipment, pump configuration, and pipelines. Prepare a Technical Memorandum describing the hydraulic design evaluation. Consultant shall use the **Metro Datum**.
- 2.3 Recommended an odor and corrosion control strategy for the CSO facility and associated structures. Present the analysis in a Technical Memorandum. Attend two two-hour meetings with the county's Odor Control Task Force to discuss and determine the odor and corrosion control strategy.
- 2.4 If needed, electrical service and possible standby engine generator description, summarizing requirements for establishing Seattle City Light electrical service to the CSO facility site and describing the proposed engine generator system. Analysis will be presented in a Technical Memorandum.
- 2.5 Instrumentation, and control system strategy, based on the county's Wastewater Treatment Division, Pump Station Design Guideline document. Instrumentation and control strategy will be defined through process and instrumentation diagrams (P&ID's) and preliminary process narratives. Present the analysis in a Technical Memorandum.
- 2.6 Development of architectural theme and low maintenance landscaping program for any above grade structures. Present the analysis in a Technical Memorandum.
- 2.7 Perform predesign for the preferred CSO facilities including facility lay out, profile, any necessary pipelines (size and materials), pumping systems, odor control and corrosion protection systems, mechanical systems, electrical systems, and emergency power systems. Identify utility conflicts. Determine the basis of design. The results of this work will be presented in a Technical Memorandum.
- 2.8 Risk analysis describing potential problems to cost and schedule that could result from differing site conditions, equipment delivery, adverse bidding environment, inability to obtain permits or rights-of-way, environmental compliance concerns, and similar construction risk factors. Define methods to minimize these risks. Risk analysis will be presented in a Technical Memorandum.
- 2.9 Preliminary final design and construction sequencing requirements and preliminary construction schedule, summarized in a Technical Memorandum.
- 2.10 Outline specifications based on Wastewater Treatment Division's Guide Specifications including a table of contents indicating proposed specification sections, a preliminary equipment list, and identification of any specification sections currently not included in King county standard specifications. Specifications shall be in the county's standard font (Arial 11). Wastewater Treatment Division uses SpecLink specifications.
- 2.11 Estimate Total Life Cycle cost for construction, operation and maintenance for the CSO facility based on the county established operating and maintenance cost information.
- 2.12 All Technical Memoranda will be presented to the county for review. The county will provide the consultant with written review comments. The consultant shall incorporate county review comments and provide written response to the county comments. All

revised and finalized Technical Memos will include the county comments. All Tech Memos shall meet the county's Style Guide criteria.

- 2.13 Work with the county art coordinator or artists to incorporate art with the facility.
 - 2.14 Conduct a LEED evaluation for the CSO facility, including a LEED checklist. Prepare a LEED technical memo. (See Task 255).
 - 2.15 If requested by the county, evaluate improvements to existing Barton wastewater facilities and the impacts to the Barton CSO facility.
- 3. Facility Plan.** Facility Plan will consist of an executive summary and chapters discussing project issues (organized as chapters) regarding environmental compliance, permitting, property and easement acquisition with strategies for appeals and/or condemnation, community relations, geo-technical investigations, survey and base mapping, engineering disciplines, and outline specifications. Prior to finalization of the predesign study, the draft report shall submit to the county, the State Department of Ecology, and Federal agencies for review and comment. The Facility Plan shall satisfy the requirements of federal rule 40 CRF 35 and state WAC 173-240-060.
- 4. Independent Project Review.** The consultant shall assign reviewers independent of project team to perform design alternative validation review prior to finalizing the predesign work. Document and incorporate all comments to the final predesign report.

Deliverables:

- a. Attend and write meeting notes and action items for two four-hour workshops, two four-hour meetings, and five two-hour meetings.
- b. Draft and final Facility Plan. One bound hard copy, one unbound hard copy, and 30 electronic copies on CD in pdf format of both draft and final facility plan.
- c. Summary of review comments for the draft facility plan and consultant responses to comments.

Task 240 Barton Cost Estimating

Conduct a Total Life Cycle cost estimating for the alternative siting analysis and facility plan. Include both construction costs and operation and maintenance costs as described in task 205 and 235. Deliverables are described in task 205 and 235.

Task 245 Barton Property and Easement Acquisition Survey

The county may start property acquisition during the predesign phase of the project. This task includes survey work required to support the county's acquisition of property and easements. The consultant, using county examples, will prepare legal descriptions and exhibit maps for temporary and permanent easements for the Barton CSO facility site. Assume three utility easements and one CSO facility acquisition.

1. **Survey.** The county may acquire the property site for the Barton CSO facility. It is therefore recommended that an American Land Title Association (ALTA) survey be performed. The ALTA survey will be performed to the Minimum Standard Detail Requirements as adopted by ALTA, American Congress on Surveying and Mapping (ASCM), and the National Society of Professional Surveyors in 1999. The ALTA survey will include a legal description and property corners will be set.
2. **Exhibit maps.** The exhibit maps will include:
 - Parcel depiction with adjacent streets
 - Permanent and temporary easement location
 - Permanent and temporary easement dimensions
 - Permanent and temporary easement area.

- Purpose of easement
- Ownership name

Deliverables:

- a. ALTA survey for one (1) CSO facility site acquisition.
- b. Legal descriptions and exhibit maps for required for up to three (3) utility easements.

Task 250 Barton Property and Easement Acquisition Services

The county will lead the acquisition process. Under the county's direction, the consultant shall provide services during the acquisition for one CSO facility site and three utility easements, as needed.

1. **Strategy Meetings.** Prepare for and attend two two-hour to discuss property and easement acquisition strategies.
2. **Acquisition Services.** The consultant shall provide services for the acquisition of easements and fee purchases based on the county policies and guidelines. Using the county's approved title and appraisal companies, the consultant shall provide services for negotiation including Title Reports. Work includes:
 - order preliminary title commitments for the Barton CSO facility site and easements,
 - obtain up to six Rights-of-Entry Agreements from property owners to support easement and CSO facility site design, geotechnical, ALTA survey, and environmental investigations,
 - coordinate and provide surveying and provide up to three legal descriptions, plan views, of properties and easements,
 - participate with six two-hour negotiations per site for the acquisition for necessary property rights,
 - prepare documents using county examples, policies and guidelines,
 - prepare documents in proper form for recordation and record documents if necessary,
 - facilitate closing, Escrow instructions, and prepare closing binders, as requested,
 - provide acquisition services to the county PAO's legal review of the draft agreements,
 - prepare and maintain contact logs,
 - provide acquisition services for the county's condemnation process, if necessary and
 - conduct Environmental Phase I and Phase II reports as requested for acquisitions.

***Note: King County will be responsible for the cost of property and easement purchase**

Deliverables:

- a. ~~Three~~ Four legal descriptions and plan views of properties and easements.
- b. Preliminary title commitments for storage site and easement sites.
- c. Obtain six rights-of-entry.
- d. Attend six two-hour negotiation sessions per site and prepare notes and action items.
- e. Prepare six Property and easement transfer documents.
- f. Escrow instructions and closing binders.
- g. Attend two two-hour acquisition strategy meetings with the county's project team.
- h. Phase I and Phase II environmental review on up to three easement properties and one CSO facility site.

Task 255 Barton Other Services

1. **Response to Review Comments.** The scope of work is based on a limited evaluation of CSO facility configurations, CSO facility sites, pipeline alignments, existing guide specifications and design standards. Additional analysis or a revision from current practices

may be required in response to concerns raised by different project process, such as permit review, public comment, environmental review, elected officials, engineering reviews or other similar circumstances. The additional analysis or revision may increase the scope of predesign effort, plus associated work in surveying, geotechnical, environmental, community relations, permitting tasks, or Facility Plan tasks.

Deliverables:

- a. Project documentation for work products or written responses to support up to 50 comments or questions from public officials, permit agencies, environmental regulatory agencies, or the public.
 - b. Tabulation of the county and other agencies review comments, the consultant response, and summary of resolutions.
2. **Quality Assurance.** This task is to assure the quality of all work performed under the proposed contract, including coordinating and interfacing activities and deliverables. Develop and implement a QA/QC plan. The consultant shall assign reviewers independent of the project team to review all project deliverables. The quality task leader will coordinate the consultant review and response of all of the county comments. All comments will be incorporated into the documents or will be documented as to why comments are not included.

Deliverables:

- a. QA/QC plan (to be included in the project plan).
3. **Sustainable Building Practices.** In keeping with the county's Green Building Initiative the consultant shall provide LEED (Leadership in Energy and Environmental Design) accredited design professionals as members of the design team. Green building principles, practices and materials (LEED) shall be incorporated into the predesign work of this contract for the Barton CSO facility.

Deliverables:

- a. Sustainable design: conduct one four-hour **charrette** that produces the following:
 - List of LEED points to be targeted for the CSO facility.
 - b. Completed LEED Green Rating System Checklist (to be included in the Facility Plan) for the CSO facility.
 - c. Technical memorandum evaluating sustainable building practice alternatives and identification of opportunities for "Green" practices (to be included in the Facility Plan) for the CSO facility.
 - d. Meeting notes and action items.
4. **King County Art Program.** The county Public Art Program may develop public artwork as an element of this project. If so, an artist will be retained under a separate contract, and the consultant shall work with the designated artist to integrate public art elements into the project. This task may only be used at the county's direction.

Deliverables

- a. Up to three two-hour meetings with artist.
- b. Art Integration Products if required.

5. **Alternative Project Delivery Contracting**

Evaluate using up to three alternative project delivery methods for the Barton CSO facility. Prepare a technical memorandum describing the advantages and disadvantages of the

alternative method for the project costs, schedule, and risk. If requested by the county, draft a scope of work and project schedule for the alternative project delivery method.

Deliverables:

- a. Draft and final Tech Memo for county review. Provide one bound hard copy, one unbound hard copy, and one electronic copy in pdf format on compact disk of both the draft and final memos.
6. **Existing Facility Evaluation.** If requested by the county, evaluate improvements to existing county wastewater facilities upstream or downstream of the Barton CSO facility and the impacts to the CSO facility.

Deliverables:

- a. Draft and final Tech memo for King county review. Provide 1 bound hard copy, 1 unbound hard copy, and 1 electronic copy in pdf format on compact disk of both the draft and final memos.

Murray CSO PROJECT

Task 300 Murray CSO Flow Analysis

Under this task, the consultant shall perform the following work:

1. **Murray CSO Flow Analysis.** The county will calibrate recently collected flow data and incorporate it to the flow model to perform additional CSO flow analysis for the Murray CSO facility and will determine the size of the Murray CSO facility. The consultant shall work with the county's flow modeling group. Review the county's CSO flow analysis, peak flows estimates, and CSO facility size determinations.
2. **Assess Impacts of Global Warming.** Assess the potential impacts of global warming on the sizing, hydraulics, and location of the CSO facility. This would include the effects global warming has on rainfall and on rising sea levels.
3. **Project Team Meeting.** Hold up to two two-hour meetings with the county and others to discuss the county's CSO flow analysis, CSO facility capacity sizing, and an overview of the proposed Murray CSO facility.

Deliverables:

- a. Attend up to two two-hour meetings. Distribute meeting notes and action items.

Task 305 Murray CSO Project Alternative Development and Siting Evaluation

CSO Facility Development and Siting Evaluation. For the Murray CSO facility, develop project alternatives and alternative facility sites. Alternatives shall include storage and other improvements in the drainage basin. Conduct an evaluation to identify and select a preferred CSO facility and site. Storage options would include both off-line and in-line CSO facilities. If requested by the county, evaluate improvements to existing Murray wastewater facilities and the impacts to the Murray CSO facility. Prepare a report describing the alternative facility and siting development process along with the development of criteria and an assessment of each alternative against the criteria. This assessment will lead to the selection of a preferred Murray CSO facility and site. The evaluation shall include the ability to: (1) minimize public impacts acquiring property, (2) identify and secure initial permits and access rights for studies, as well as all permanent property rights and permits to acquire, (3) minimize public impacts during construction and operation, (4) minimize environmental impacts, (5) minimize constructability impacts, (6) meet CSO program requirements, (7) estimate costs for land and easement acquisition, (8) address engineering issues, including geotechnical, and (9) minimize total life

cycle costs. Prior to starting this work, the county will have worked with the community and developed policy siting criteria (community, technical, environmental, financial), detailed evaluation questions, and key factors (community, environmental and engineering) to guide the siting process.

1. **Alternative Selection Workshops.** Conduct up to three four-hour workshops with the county, public agencies, community stakeholders, and other interested parties to discuss and obtain input on alternatives.
2. **Planning Level Total Life Cycle Cost Estimates.** Provide planning level total life cycle costs estimates for the alternatives and the preferred CSO facility at each project location.
3. **Prepare a Siting Report detailing the work under this task.**

Deliverables:

- a. Draft and Final Siting Report for CSO facility development and site selection, including total life cycle cost estimates. Provide one bound hard copy, one unbound hard copy, and one electronic copy on compact disk, pdf format.
- b. Conduct three four-hour workshops and prepare notes of workshops.

Task 310 Murray Environmental Compliance

The county is the designated State Environmental Policy Act (SEPA) lead agency for this project. The county will determine and conduct the appropriate environmental review, issue a project SEPA Threshold Determination, and release required notices and documents. The consultant will be required to provide services as necessary for the environmental review process and, if needed, the Endangered Species Act (ESA) Section 7 review process. The county is obtaining Washington State Water Pollution Control Revolving Fund (SRF) money for this project. This funding will require King county to produce a Facility Plan. In order for the Facility Plan to be approved by the State of Washington, the requirements of the State Environmental Review Process (SERP) must be completed. To complete SERP, the county must receive the Department of Ecology's (DOE) concurrence on all SEPA documents and the Environmental Information Document (EID). Services may include but not be limited to the following:

1. **Environmental Condition Assessments.** Identify existing environmental conditions including regulatory conditions that may influence siting, construction or operation. Identify potential adverse impacts upon the environment from the project and recommend appropriate mitigation measures. Environmental elements and issues may include wetlands, fisheries, noise, vegetation, traffic, and water quality, among others.
2. **Environmental Documentation.** Generate a memo documenting existing environmental conditions, potential environmental impacts and mitigation measures. This documentation could be used to evaluate the feasibility of the preferred CSO facility site and support the SEPA review.
3. **Attend Meetings.** Attend up to four two-hour meetings with WTD and regulatory agencies, as directed.
4. **ESA Evaluation.** Assess potential for ESA Section 7 review of project elements by location and, if feasible, propose project modifications that could avoid the need for this review.
5. **ESA Documentation.** Prepare biological evaluation, biological assessment, or other documents to allow compliance with ESA if required.
6. **Environmental Information Document.** Provide services for completing the EID, including the contact source list, initial letter, level of assessment form, the Environmental Report (ER), and Agency Tracking Checklist.
7. **SERP and SEPA.** Provide services for completing SERP and SEPA.
8. **Phases I and II Environmental Assessments.** Perform Phase I Environmental Site Assessment in accordance with ASTM E 1527-05 *Standard Practice for Environmental Site*

Assessments: Phase I Environmental Site Assessment Process, to determine whether recognized environmental conditions are present at the preferred CSO facility sites. -
Conduct Phase II Environmental Assessment, if requested by the County.

Deliverables:

- a. Technical memorandum identifying existing conditions, potential impacts upon the environment and recommended mitigation measures.
- b. Reports for the SEPA review. Assume 5 reports at 20 pages each.
- c. Attend four (4) – 2-hr meetings with WTD and regulatory agencies if needed.
- d. Meeting notes and action items.
- e. Report documenting ESA compliance, if required.
- f. Phases I and II Environmental Assessment reports
- g. Environmental Information Document

Task 315 Murray Permit Services

The county will procure permits for the project. The county will gather and summarize information on local, state, and federal permit requirements that may be used to evaluate the feasibility of CSO facility site alternatives. The county cannot make formal application for most permits until the project is in the 30 percent design level. During the predesign phase, the consultant's participation in permit services may include the tasks listed below.

1. **Permit Meetings.** Attend and/or provide services, if required, for six two-hour meetings with other agencies, which are arranged by the county to present project sites and receive agency comments. Prepare presentation materials as necessary for these meetings. Assume up to three boards and six drawings or sketches.
2. **Permit Identification.** After the preferred CSO facility sites have been defined, prepare a spreadsheet matrix listing all permits and agreements required for this project. Include statutory authority, submittal requirements, review process/schedule, and appeal procedures if applicable.
3. **Permit Application Documents.** Provide services to the county in starting to prepare local, state and federal permit applications, project narratives, drawings as well as responses to initial agency comments or requests for information, and provide needed revisions to applicable plans. Provide permit support for any required Section 404/401 applications using the Joint Aquatic Resource Permit (JARPA) Application. Assume 10 draft permit applications.
4. **Permit Required Property Rights.** Provide services to the county for coordination of property rights needed for specific permit applications.

Deliverables:

- a. Prepare documentation for initial permit applications, and respond to questions from permitting agencies in writing. The county will review response and submit updated versions to permit agencies. Assume 10 draft permit applications.
- b. Provide any needed wetland and wetland buffer delineation, wetland reports, sensitive areas mapping, or geological reports needed for permit submittals.
- c. Prepare for and attend six two-hour meetings with county and other permit agencies.
- d. Presentation materials: three boards and six drawings or sketches for meetings and facilitate meeting, if needed.
- e. Meeting notes and action items.

Task 320 Murray Community Relations

The county's community relations staff will lead this effort for this contract. In addition, county staff will:

- maintain Web site,
- develop and issue all news releases (if needed), and
- coordinate communications with the local jurisdictions.

County will cover costs of mailing or delivery of fliers and meeting rooms (to be direct billed to county).

County graphics department, print shop, and sign shop will be used as needed.

The consultant's participation in community relations services may include the tasks listed below. All written materials and communications products are to be reviewed and approved by the county:

1. **Community Relations Plan (CRP).** Participate in developing a community relations plan in accordance with county public involvement guidelines. Identify target audiences, potential issues and concerns, and ways to inform and involve the community in the project. It will be updated as the project progresses.
2. **Community Issues Analysis.** Compile information that could be used to evaluate the feasibility of the preferred CSO facility sites. Support development of a community issues/input matrix to document and track public input.
3. **Attend Meetings.** Attend up to six two-hours meetings with the county project team as requested.
4. **Stakeholder Workshops.** Participate in planning, organizing and publicizing up to three four-hour stakeholder workshops. Prepare workshop materials, such as invitations, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend and facilitate workshops and prepare workshop summaries.
5. **24-hour Project Information Line.** Monitor info line during geotechnical work. Prepare log summarizing questions and responses.
6. **Community Meetings.** Participate in planning, organizing and publicizing three four-hour community meetings. Prepare meeting materials, such as meeting announcements, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend meetings and prepare meeting summaries. If requested, facilitate the meetings.
7. **Community Briefings.** Participate in up to three two-hour community group briefings. Participate in the scheduling, preparation of briefing materials, attend briefings and prepare written summaries. If requested, facilitate the briefings.
8. **Public Information Materials.** Draft, produce and coordinate distribution of up to 10 informational pieces.

Deliverables:

- a. Draft and final community relations plan.
- b. Attend six two-hour meetings with county's project team.
- c. Prepare materials for and attend three four-hour stakeholder workshops. Provide workshop summaries.
- d. Prepare materials for and attend three four-hour community meetings. Provide meeting summaries.
- e. Prepare materials and summaries for up to three two-hour community briefings.
- f. Project informational pieces (up to 10). (Assume one page each with information on both sides).

Task 325 Murray Geotechnical Investigations

Perform predesign level geotechnical investigation for the Murray CSO facility. The consultant shall coordinate with the WTD geotechnical guidelines and reporting requirements. The

University of Washington (UW) geologic database shall also be used by the consultant. The consultant will provide the following services:

1. **Geotechnical Investigation.** Perform geotechnical investigation, including the research, acquisition and review of existing available geotechnical, historical land use, photographs, and ground water data for projects completed at or in the vicinity of the alternatives and preferred sites for the Murray CSO facility. Conduct a field investigation of surface geology.
2. **Technical Memorandum.** Prepare a technical memorandum detailing the results of the investigation for county review. The memorandum shall include a general discussion of the geology in the project area, available boring logs, ground water conditions, descriptions of problems in the area, areas that should be avoided during preliminary design and make preliminary recommendations for dewatering, for structures and pipelines. The report shall also recommend subsurface explorations for the preferred Murray CSO facility site.
3. **Boring Application Documents.** Prepare all necessary documents and plans showing the test pits and boring locations for the application of required soil boring work permits.
4. **Soil Borings.** Conduct a series of exploration borings, soil testing to characterize foundation conditions and other engineering/construction conditions for structures and pipelines of the preferred Murray CSO facility site. The subsurface exploration and testing shall be based on the recommendation identified during the geotechnical investigation and in compliance with WTD geotechnical Guidelines and reporting requirements. Assume for purposes of the proposal response:
 - three borings for pipelines averaging 25 feet deep,
 - three borings for preferred CSO facility site averaging 50 feet deep, and
 - the boring logs shall use the **Metro Datum**.
5. **Geotechnical Analysis.** Perform a more detail geotechnical analysis after borings are completed. Attend two two-hour meetings with county to review the analysis.
6. **Predesign Geotechnical Report.** Prepare a predesign geotechnical report for county review and comment. The predesign geotechnical report shall include preliminary recommendations for foundations of selected structures and pipelines, backfilling requirements for structure excavation, surface restoration, trenchless requirements, slope stability measures, erosion control measures, dewatering requirements, and other necessary engineering criteria. The report will include a discussion of seismic requirements for facilities and trench support requirements. Attend two two-hour meeting with county to review soil report recommendations.

Deliverables:

- a. Technical memorandum of initial geotechnical investigation results for review by the county. The county shall provide review comments and the consultant shall respond to the comments in writing.
- b. Plans showing test pits and boring locations for application of required permits for soil borings.
- c. Technical memorandum on subsurface exploration and testing for county review.
- d. Predesign geotechnical report including all technical memorandum and plans. Provide draft report for county review and comment. Provide final report in both electronic and hard copy format.
- e. Attend four two-hour meetings with county and meeting notes and action items.

Task 330 Murray Survey and Mapping

Fieldwork, survey, preliminary base mapping information and related services will be needed for the alternative site analysis, preferred CSO facility site, pipelines, and predesign work. The consultant shall use the **Metro Datum**. Tasks may include, but are not limited to, the following:

1. **Survey.** Establish horizontal and vertical controls. Conduct ground survey to collect data for all above and below ground fixed objects including the locations of all existing utilities and their ground and invert elevations, when possible. Provide property surveys for acquisition documents needed for recording. If needed, identify and pothole utility conflicts. All survey data will be placed on the preliminary base mapping. The consultant shall use the Metro Datum.
2. **Base Map.** Prepare preliminary base maps at one-foot contour interval and showing property lines, all above ground structures and underground utilities. These preliminary base maps will be used by the consultant for the alternative site analysis and Facility Plan. Additional survey and base mapping will be performed during the final design phase. The county will give the preliminary base maps produced during this predesign phase to the selected final design consultants for their use. Base maps shall use the Metro Datum. Base maps shall be at a scale of 1"=20' and shall be stamped by a Washington State registered surveyor.

Deliverables:

Base maps stamped by a Washington State registered surveyor in AutoCAD format on compact disk and as hard copy.

Task 335 Murray CSO Facilities Plan

The consultant shall prepare a Facility Plan for the Murray CSO facility. The Facility Plan shall satisfy the requirements of federal rule 40 CRF 35 and state WAC 173-240-060 and 173-245-050.

1. **Meetings.** Participate with the county in conducting the following meetings as part of the predesign process:
 - 1.1 Facilitate one (1) – 4-hr kick off workshop with King county staff.
 - 1.2 Facilitate one (1) – 4-hr O&M meeting with operation and maintenance staff to determine O&M preferences and to address O&M issues.
 - 1.3 Facilitate one (1) – 4-hr meeting with King county staff to identify potential design problems and design preferences
 - 1.4 Attend one (1) – 2-hr productivity initiative meeting to evaluate the feasibility of potential cost saving measures.
 - 1.5 Facilitate one (1) – 4-hr summary workshop with county staff to present the findings and recommendations of the draft Facility Plan and to solicit comments.
2. **Predesign Analysis.** Prepare a Facility Plan for the Murray CSO facility, including the following elements:
 - 2.1 Design criteria summarizing the performance requirements for mechanical and electrical equipment. Functional, space, and utility requirements for the CSO facility, including summary of design code requirements ("code search") that impact the CSO facility configuration (Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, Washington State Energy Code, National Electric Code, local noise ordinances, and NFPA 820). Evaluation will establish seismic importance factor for the CSO facility. Prepare a Technical Memorandum describing this evaluation.
 - 2.2 Hydraulic Design Parameters - Develop hydraulic design parameters. Make recommendations on the sizing of any pumping equipment, pump configuration, and

pipelines. Prepare a Technical Memorandum describing the hydraulic design evaluation. consultant shall use the Metro Datum.

- 2.3 Recommended an odor and corrosion control strategy for the CSO facility and associated structures. Present the analysis in a Technical Memorandum. Attend two (2) – 2-hr meetings with King county's Odor Control Task Force to discuss and determine the odor and corrosion control strategy.
- 2.4 If needed, electrical service and possible standby engine generator description, summarizing requirements for establishing Seattle City Light electrical service to the CSO facility site and describing the proposed engine generator system. Analysis will be presented in a Technical Memorandum.
- 2.5 Instrumentation, and control system strategy, based on King county Wastewater Treatment Division, Pump Station Design Guideline document. Instrumentation and control strategy will be defined through process and instrumentation diagrams (P&ID's) and preliminary process narratives. Present the analysis in a Technical Memorandum.
- 2.6 Development of architectural theme and low maintenance landscaping program for any above grade structures. Present the analysis in a Technical Memorandum.
- 2.7 Perform predesign for the preferred CSO facilities including facility lay out, profile, any necessary pipelines (size and materials), pumping systems, odor control and corrosion protection systems, mechanical systems, electrical systems, and emergency power systems. Identify utility conflicts. Determine the basis of design. The results of this work will be presented in a Technical Memorandum.
- 2.8 Risk analysis describing potential problems to cost and schedule that could result from differing site conditions, equipment delivery, adverse bidding environment, inability to obtain permits or rights-of-way, environmental compliance concerns, and similar construction risk factors. Define methods to minimize these risks. Risk analysis will be presented in a Technical Memorandum.
- 2.9 Preliminary final design and construction sequencing requirements and preliminary construction schedule, summarized in a Technical Memorandum.
- 2.10 Outline specifications based on Wastewater Treatment Division's Guide Specifications including a table of contents indicating proposed specification sections, a preliminary equipment list, and identification of any specification sections currently not included in King county standard specifications. Specifications shall be in King county's standard font (Arial 11). Wastewater Treatment Division uses SpecLink specifications.
- 2.11 Estimate Total Life Cycle cost for construction, operation and maintenance for the CSO facility based on the county established operating and maintenance cost information.
- 2.12 All Technical Memoranda will be presented to King county for review. King county will provide the consultant with written review comments. Incorporate county review comments and provide written response to King county comments. All revised and finalized Technical Memos will include King county comments. All Tech Memos shall meet King county's Style Guide criteria.
- 2.13 Work with King county Art coordinator or artists to incorporate art with the facility.

- 2.14 Conduct a LEED evaluation for the CSO facility, including a LEED checklist. Prepare a LEED technical memo. (See Task 255).
- 2.15 If requested by the county, evaluate improvements to the existing Murray wastewater facilities and the impacts to the Murray CSO facility.
- 3. Facility Plan.** Facility Plan will consist of an executive summary and chapters discussing project issues (organized as chapters) regarding environmental compliance, permitting, property and easement acquisition with strategies for appeals and/or condemnation, community relations, geo-technical investigations, survey and base mapping, engineering disciplines, and outline specifications. Prior to finalize the predesign study, draft report shall submit to King county, the State Department of Ecology, and Federal agencies for review and comment. The Facility Plan shall satisfy the requirements of federal rule 40 CRF 35 and state WAC 173-240-060.
- 4. Independent Project Review.** The consultant shall assign reviewers independent of project team to perform design alternative validation review prior to finalizing the predesign work. Document and incorporate all comments to the final predesign report.

Deliverables:

- a. Attend and write meeting notes and action items for two four-hour workshops, two four-hour meetings, and five two-hour meetings.
- b. Draft and final Facility Plan. One bound hard copy, one unbound hard copy, and 30 electronic copies on CD in pdf format of both draft and final facility plan.
- c. Summary of review comments for the draft facility plan and consultant responses to comments.

Task 340 Murray Cost Estimating

Conduct a Total Life Cycle cost estimating for the alternative siting analysis and facility plan. Include both construction costs and operation and maintenance costs as described in task 205 and 235. Deliverables are described in task 305 and 335.

Task 345 Murray Property and Easement Acquisition Survey

The county may start property acquisition during the predesign phase of the project. This task includes survey work required to support the county's acquisition of property and easements. The consultant, using county examples, will prepare legal descriptions and exhibit maps for temporary and permanent easements for the Murray CSO facility site. Assume three utility easements and one CSO facility acquisition.

1. **Survey.** The county may acquire the property site for the Murray CSO facility. It is therefore recommended that an American Land Title Association (ALTA) survey be performed. The ALTA survey will be performed to the Minimum Standard Detail Requirements as adopted by ALTA, American Congress on Surveying and Mapping ("ASCM"), and the National Society of Professional Surveyors in 1999. The ALTA survey will include a legal description and property corners will be set.
2. **Exhibit Maps.** The exhibit maps will include:
 - parcel depiction with adjacent streets,
 - permanent and temporary easement location,
 - permanent and temporary easement dimensions,
 - permanent and temporary easement area,
 - purpose of easement, and
 - ownership name.

Deliverables:

- a. ALTA survey for one CSO facility site acquisition.
- b. Legal descriptions and exhibit maps for required for up to three utility easements.

Task 350 Murray Property and Easement Acquisition Services

The county will lead the acquisition process. Under the county's direction, consultant shall provide services during the acquisition for one CSO facility site and three utility easements, as needed.

1. **Strategy Meetings.** Prepare for and attend two two-hour meetings to discuss property and easement acquisition strategies.
2. **Acquisition Services.** Consultant shall provide services for the acquisition of easements and fee purchases based on the county policies and guidelines. Using the county approved title and appraisal companies, the consultant shall provide services for negotiation including title reports. Work includes:
 - order preliminary title commitments for the Murray CSO facility site and easements,
 - obtain up to six Rights-of-Entry Agreements from property owners to support easement and CSO facility site design, geotechnical, ALTA survey, and environmental investigations,
 - coordinate and provide surveying and provide up to three legal descriptions, plan views, of properties and easements,
 - participate with six two-hour negotiations per site for the acquisition for necessary property rights,
 - prepare documents using county examples, policies and guidelines,
 - prepare documents in proper form for recordation and record documents if necessary,
 - facilitate Closing, Escrow instructions, and prepare Closing Binders, as requested,
 - provide services for King county PAO's legal review of the draft agreements,
 - prepare and maintain contact logs,
 - provide services for the county condemnation process, if needed, and
 - conduct Environmental Phase I and Phase II reports as requested for acquisitions.

***King County will be responsible for the cost of property and easement purchase**

Deliverables:

- a. ~~Three~~ Four legal descriptions and plan views of properties and easements.
- b. Preliminary title commitments for storage site and easement sites.
- c. Obtain six rights-of-entry.
- d. Attend six two-hour negotiation sessions per site and prepare notes and action items.
- e. Prepare six property and easement transfer documents.
- f. Escrow instructions and closing binders.
- g. Attend two two-hour acquisition strategy meetings with county's project team.
- h. Phase I and Phase II environmental review on up to three easement properties, one CSO facility site.

Task 355 Murray Other Services

1. **Response to Review Comments.** The scope of work is based on a limited evaluation of CSO facility configurations, CSO facility sites, pipeline alignments, existing guide specifications, and design standards. Additional analysis or a revision from current practices may be required in response to concerns raised by different project process, such as permit review, public comment, environmental review, elected officials, engineering reviews or other similar circumstances. The additional analysis or revision may increase the scope of

predesign effort, plus associated work in surveying, geotechnical, environmental, community relations, permitting tasks, or Facility Plan tasks.

Deliverables:

- a. Project documentation for work products or written response service for up to 50 comments or questions from public officials, permit agencies, environmental regulatory agencies, or the public.
- b. Tabulation of King county and other agencies review comments, the consultant response, and summary of resolutions.
2. **Quality Assurance.** This task is to assure the quality of all work performed under the proposed contract, including coordinating and interfacing activities and deliverables. Develop and implement a QA/QC plan. The consultant shall assign reviewers independent of the project team to review all project deliverables. The quality task leader will coordinate the consultant review and response of all of the county comments. All comments will be incorporated into the documents or will be documented as to why comments are not included.

Deliverables:

- a. QA/QC plan (to be included in the project plan).
3. **Sustainable Building Practices.** In Keeping with the county's Green Building Initiative the consultant shall provide LEED (Leadership in Energy and Environmental Design) accredited design professionals as members of the design team. Green building principles, practices and materials (LEED) shall be incorporated into the predesign work of this contract for the Murray CSO facility.

Deliverables:

- a. Sustainable design: conduct one four-hour **charette** that produces the following:
 - List of LEED points to be targeted for the CSO facility.
- b. Completed LEED Green Rating System Checklist (to be included in the Facility Plan) for the CSO facility.
- c. Technical memorandum evaluating sustainable building practice alternatives and identification of opportunities for "green" practices (to be included in the Facility Plan) for the CSO facility.
- d. Meeting notes and action items.
4. **King county Art Program.** The county Public Art Program may develop public artwork as an element of this project. If so, an artist will be retained under a separate contract, and the consultant shall work with the designated artist to integrate public art elements into the project. This task may only be used at the county's direction.

Deliverables

- a. Up to three two-hour meetings with artist.
- b. Art Integration Products if required.

5. Alternative Project Delivery Contracting

Evaluate using up to three alternative project delivery methods for the Barton CSO facility. Prepare a technical memorandum describing the advantages and disadvantages of the alternative method for the project costs, schedule, and risk.

Deliverables:

- a. Draft and final Tech Memo for county review. Provide one bound hard copy, one unbound hard copy, and one electronic copy in pdf format on compact disk of both the draft and final memos.
 - b. If directed by the county, draft a scope of work and project schedule for the alternative project delivery method.
- 6. Existing Facility Evaluation.** If requested by the county, evaluate improvements to existing county wastewater facilities upstream or downstream of the Murray CSO facility and the impacts on the CSO facility.

Deliverables:

- a. Draft and final Tech Memo for King county review. Provide 1 bound hard copy, 1 unbound hard copy, and 1 electronic copy in pdf format on compact disk of both the draft and final memos.

Magnolia CSO PROJECT

Task 400 Magnolia CSO Flow Analysis

Under this task, the consultant shall perform the following work:

1. **Magnolia CSO Flow Analysis.** The county will calibrate recently collected flow data and incorporate it to the flow model to perform additional CSO flow analysis for the Magnolia CSO facility and will determine the size of the CSO facility. The consultant shall work with the county's flow modeling group. Review the county's CSO flow analysis, peak flows estimates, and CSO facility size determinations.
2. **Assess Impacts of Global Warming.** Assess the potential impacts of global warming on the sizing, hydraulics, and location of the CSO facility. This would include the effects global warming has on rainfall and on rising sea levels.
3. **Project Team Meeting.** Hold up to two two-hour meetings with county and others to discuss the county's CSO flow analysis, CSO facility capacity sizing, and an overview of the proposed Magnolia CSO facility.

Deliverables:

- a. Attend up to two two-hour meetings. Distribute meeting notes and action items.

Task 405 Magnolia CSO Project Alternative Development and Siting Evaluation

CSO Facility Development and Siting Evaluation. For the Magnolia CSO facility, develop project alternatives and alternative facility sites. Alternatives shall include storage and other improvements in the drainage basin. Conduct an evaluation to identify and select a preferred CSO facility and site. Storage options would include both off-line and in-line CSO facilities. If requested by the county, evaluate improvements to the existing South Magnolia wastewater facilities and the impacts on the Magnolia CSO facility. Prepare a report describing the alternative facility and siting development process along with the development of criteria and an assessment of each alternative against the criteria. This assessment will lead to the selection of a preferred Magnolia CSO facility and site. The evaluation shall include the ability to: (1) minimize public impacts acquiring property, (2) identify and secure initial permits and access rights for studies, as well as identifying all permanent property rights and permits to acquire, (3) minimize public impacts during construction and operation, (4) minimize environmental impacts, (5) minimize constructability impacts, (6) meet CSO program requirements, (7) estimate costs for land and easement acquisition, (8) address engineering issues, including geotechnical, and (9) minimize total life cycle costs. Prior to starting this work, the county will have worked with the community and developed policy siting criteria (community, technical, environmental,

financial), detailed evaluation questions, and key factors (community, environmental and engineering) to guide the siting process.

1. **Alternative Selection Workshops.** Conduct up to three four-hour workshops with the county, public agencies, community stakeholders, and other interested parties to discuss and obtain input on the alternatives.
2. **Planning Level Total Life Cycle Cost Estimates.** Provide planning level total life cycle costs estimates for the alternatives and the preferred CSO facility at each project location.
3. **Prepare a Siting Report detailing the work under this task.**

Deliverables:

- a. Draft and Final Siting Report for CSO facility development and site selection, including total life cycle cost estimates. Provide one bound hard copy, one unbound hard copy, and one electronic copy on compact disk, pdf format.
- b. Conduct three four-hour workshops and prepare notes of workshops.

Task 410 Magnolia Environmental Compliance

The county is the designated State Environmental Policy Act (SEPA) lead agency for this project. The county will determine and conduct the appropriate environmental review, issue a project SEPA Threshold Determination, and release required notices and documents. The consultant will be required to provide services as necessary for the environmental review process and, if needed, the Endangered Species Act (ESA) Section 7 review process. The county is obtaining Washington State Water Pollution Control Revolving Fund (SRF) money for this project. This funding will require King county to produce a Facility Plan. In order for the Facility Plan to be approved by the State of Washington, the requirements of the State Environmental Review Process (SERP) must be completed. To complete SERP, the county must receive the Department of Ecology's (DOE) concurrence on all SEPA documents and the Environmental Information Document (EID). Services may include but not be limited to the following:

1. **Environmental Condition Assessments.** Identify existing environmental conditions including regulatory conditions that may influence siting, construction or operation. Identify potential adverse impacts upon the environment from the project and recommend appropriate mitigation measures. Environmental elements and issues may include wetlands, fisheries, noise, vegetation, traffic, and water quality, among others.
2. **Environmental Documentation.** Generate a memo documenting existing environmental conditions, potential environmental impacts and mitigation measures. This documentation could be used to evaluate the feasibility of the preferred CSO facility site and support the SEPA review.
3. **Attend Meetings.** Attend four two-hour meetings with WTD and regulatory agencies if needed.
4. **ESA Evaluation.** Assess potential for ESA Section 7 review of project elements by location and, if feasible, propose project modifications that could avoid the need for this review.
5. **ESA Documentation.** Prepare biological evaluation, biological assessment, or other documents to allow compliance with ESA if required.
6. **Environmental Information Document.** Provide services for completing the EID, including the Contact Source list, Initial Letter, Level of Assessment form, the Environmental Report (ER), and Agency Tracking Checklist.
7. **SERP and SEPA.** Provide services for completing SERP and SEPA.
8. **Phases I and II Environmental Assessments.** Perform Phase I Environmental Site Assessment in accordance with ASTM E 1527-05 *Standard Practice for Environmental Site*

Assessments: Phase I Environmental Site Assessment Process, to determine whether recognized environmental conditions are present at the preferred CSO facility sites. Conduct Phase II Environmental Assessment, if requested by the County.

Deliverables:

- a. Technical memorandum identifying existing conditions, potential impacts upon the environment and recommended mitigation measures.
- b. Reports for the SEPA review. Assume five reports at 20 pages each.
- c. Attend four two-hour with WTD and regulatory agencies if needed.
- d. Meeting notes and action items.
- e. Report documenting ESA compliance, if required.
- f. Phases I and II Environmental Assessment reports.
- g. Environmental Information Document

Task 415 Magnolia Permit Services

The county will procure permits for the project. The county will gather and summarize information on local, state, and federal permit requirements that may be used to evaluate the feasibility of CSO facility site alternatives. The county cannot make formal application for most permits until the project is in the 30 percent design level. During the predesign phase, the consultant's participation in permit services may include the tasks listed below.

1. **Permit Meetings.** Attend and/or provide services, if required, for six two-hour meetings with other agencies, which are arranged by the county to present project sites and receive agency comments. Prepare presentation materials as necessary for these meetings. Assume up to three boards and six drawings or sketches.
2. **Permit Identification.** After the preferred CSO facility sites have been defined, prepare a spreadsheet matrix listing all permits and agreements required for this project. Include statutory authority, submittal requirements, review process/schedule, and appeal procedures if applicable.
3. **Permit Application Documents.** Provide services to the county in starting to prepare local, state and federal permit applications, project narratives, drawings as well as responses to initial agency comments or requests for information, and provide needed revisions to applicable plans. Provide permit support for any required Section 404/401 applications using the Joint Aquatic Resource Permit (JARPA) Application. Assume 10 draft permit applications.
4. **Permit Required Property Rights.** Provide services to the county for the coordination of property rights needed for specific permit applications.

Deliverables:

- a. Prepare documentation for initial permit applications, and respond to questions from permitting agencies in writing. The county will review response and submit updated versions to permit agencies. Assume 10 draft permit applications.
- b. Provide any needed wetland and wetland buffer delineation, wetland reports, sensitive areas mapping, or geological reports needed for permit submittals.
- c. Prepare for and attend six two-hour meetings with county and other permit agencies.
- d. Presentation materials: three boards and six drawings or sketches for meetings and facilitate meeting, if needed.
- e. Meeting notes and action items.

Task 420 Magnolia Community Relations

The county's community relations staff will lead this effort for this contract. In addition, county staff will:

- maintain Web site,
- develop and issue all news releases (if needed), and
- coordinate communications with the local jurisdictions.

County will cover costs of mailing or delivery of fliers and meeting rooms (to be direct billed to county).

County graphics department, print shop, and sign shop will be used as needed.

The consultant's participation in community relations services may include the tasks listed below. All written materials and communications products are to be reviewed and approved by the county:

1. **Community Relations Plan (CRP0.** Participate in developing a community relations plan in accordance with county public involvement guidelines. Identify target audiences, potential issues and concerns, and ways to inform and involve the community in the project. It will be updated as the project progresses.
2. **Community Issues Analysis.** Compile information that could be used to evaluate the feasibility of the preferred CSO facility sites. Support development of a community issues/input matrix to document and track public input.
3. **Attend Meetings.** Attend up to six two-hour meetings with the county project team as requested.
4. **Stakeholder Workshops.** Participate in planning, organizing and publicizing up to three four-hour stakeholder workshops. Prepare workshop materials, such as invitations, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend and facilitate workshops and prepare workshop summaries.
5. **24-hour project information line.** Monitor info line during geotechnical work. Prepare log summarizing questions and responses.
6. **Community Meetings.** Participate in planning, organizing and publicizing three four-hour community meetings. Prepare meeting materials, such as meeting announcements, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend meetings and prepare meeting summaries. If requested, facilitate the meetings.
7. **Community Briefings.** Participate in up to three two-hour community group briefings. Participate in the scheduling, preparation of briefing materials, attend briefings and prepare written summaries. If requested, facilitate the briefings.
8. **Public Information Materials.** Draft, produce and coordinate distribution of up to 10 informational pieces.

Deliverables:

- a. Draft and final community relations plan.
- b. Attend six two-hour meetings with county's project team.
- c. Prepare materials for and attend three four-hour stakeholder workshops. Provide workshop summaries.
- d. Prepare materials for and attend three four-hour community meetings. Provide meeting summaries.
- e. Prepare materials and summaries for up to three two-hour community briefings.
- f. Project informational pieces (up to 10). (Assume one page each with information on both sides).

Task 425 Magnolia Geotechnical Investigations

Perform predesign level geotechnical investigation for the Magnolia CSO facility. The consultant shall coordinate with the WTD geotechnical guidelines and reporting requirements. The University of Washington (UW) geologic database shall also be used by the consultant. The consultant will provide the following services:

1. **Geotechnical Investigation.** Perform geotechnical investigation, including the research, acquisition and review of existing available geotechnical, historical land use, photographs, and ground water data for projects completed at or in the vicinity of the alternatives and preferred sites for the Magnolia CSO facility. Conduct a field investigation of surface geology.
2. **Technical Memorandum.** Prepare a technical memorandum detailing the results of the investigation for county review. The memorandum shall include a general discussion of the geology in the project area, available boring logs, ground water conditions, descriptions of problems in the area, areas that should be avoided during preliminary design and make preliminary recommendations for dewatering, for structures and pipelines. The report shall also recommend subsurface explorations for the preferred Magnolia CSO facility site.
3. **Boring Application Documents.** Prepare all necessary documents and plans showing the test pits and boring locations for the application of required soil boring work permits.
4. **Soil Borings.** Conduct a series of exploration borings, soil testing to characterize foundation conditions and other engineering/construction conditions for structures and pipelines of the preferred Magnolia CSO facility site. The subsurface exploration and testing shall be based on the recommendation identified during the geotechnical investigation and in compliance with WTD geotechnical Guidelines and reporting requirements. Assume for purposes of the proposal response:
 - three borings for pipelines averaging 25 feet deep,
 - three borings for preferred CSO facility site averaging 50 feet deep, and
 - the boring logs shall use the Metro Datum.
5. **Geotechnical Analysis.** Perform a more detail geotechnical analysis after borings are completed. Attend two two-hour meetings with county to review the analysis.
6. **Predesign Geotechnical Report.** Prepare a predesign geotechnical report for county review and comment. The predesign geotechnical report shall include preliminary recommendations for foundations of selected structures and pipelines, backfilling requirements for structure excavation, surface restoration, trenchless requirements, slope stability measures, erosion control measures, dewatering requirements, and other necessary engineering criteria. The report will include a discussion of seismic requirements for facilities and trench support requirements. Attend two two-hour meeting with county to review soil report recommendations.

Deliverables:

- a. Technical memorandum of initial geotechnical investigation results for review by the county. The county shall provide review comments and the consultant shall respond to the comments in writing.
- b. Plans showing test pits and boring locations for application of required permits for soil borings.
- c. Technical memorandum on subsurface exploration and testing county review.
- d. Predesign geotechnical report including all technical memorandum and plans. Provide draft report for county review and comment. Provide final report in both electronic and hard copy format.
- e. Attend four two-hour meetings with county and meeting notes and action items.

Task 430 Magnolia Survey and Mapping

Fieldwork, survey, preliminary base mapping information and related services will be needed for the alternative site analysis, preferred CSO facility site, pipelines, and predesign work. The consultant shall use the Metro Datum. Tasks may include, but are not limited to, the following:

1. **Survey.** Establish horizontal and vertical controls. Conduct ground survey to collect data for all above and below ground fixed objects including the locations of all existing utilities and their ground and invert elevations, when possible. Provide property surveys for

acquisition documents needed for recording. If needed, identify and pothole utility conflicts. All survey data will be placed on the preliminary base mapping. The consultant shall use the Metro Datum.

2. **Base Map.** Prepare preliminary base maps at one-foot contour interval and showing property lines, all above ground structures and underground utilities. These preliminary base maps will be used by the consultant for the alternative site analysis and Predesign Report. Additional survey and base mapping will be performed during the final design phase. The county will give the preliminary base maps produced during this predesign phase to the selected final design consultants for their use. Base maps shall use the Metro Datum. Base maps shall be at a scale of 1"=20' and shall be stamped by a Washington State registered surveyor.

Deliverables:

- a. Base maps stamped by a Washington State registered surveyor in AutoCAD format on compact disk and as hard copy.

Task 435 Magnolia CSO Predesign Report

The consultant shall prepare a Predesign Report for the Magnolia CSO facility. The Magnolia facility does not have any SRF funding; therefore a Facility Plan is not required.

1. Meetings - Participate with the County in Conducting the Following Meetings as Part of the Predesign Process:

- 1.1 Facilitate one four-hour kick off workshop with county staff.
- 1.2 Facilitate one four-hour O&M meeting with operation and maintenance staff to determine O&M preferences and to address O&M issues.
- 1.3 Facilitate one four-hour meeting with King county staff to identify potential design problems and design preferences
- 1.4 Attend one two-hour productivity initiative meeting to evaluate the feasibility of potential cost saving measures.
- 1.5 Facilitate one four-hour summary workshop with county staff to present the findings and recommendations of the draft predesign report and to solicit comments.

2. Predesign Analysis. Prepare a predesign report for the Magnolia CSO facility, including the following elements:

- 2.1 Design criteria summarizing the performance requirements for mechanical and electrical equipment. Functional, space, and utility requirements for the CSO facility, including summary of design code requirements (code search) that impact the CSO facility configuration (Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, Washington State Energy Code, National Electric Code, local noise ordinances; and NFPA 820). Evaluation will establish seismic importance factor for the CSO facility. Prepare a Technical Memorandum describing this evaluation.
- 2.2 Hydraulic Design Parameters - Develop hydraulic design parameters. Make recommendations on the sizing of any pumping equipment, pump configuration, and pipelines. Prepare a Technical Memorandum describing the hydraulic design evaluation. The consultant shall use the Metro Datum.
- 2.3 Recommended an odor and corrosion control strategy for the CSO facility and associated structures. Present the analysis in a Technical Memorandum. Attend two two-hour meetings with the county's Odor Control Task Force to discuss and determine the odor and corrosion control strategy.

- 2.4 If needed, electrical service and possible standby engine generator description, summarizing requirements for establishing Seattle City Light electrical service to the CSO facility site and describing the proposed engine generator system. Analysis will be presented in a Technical Memorandum.
- 2.5 Instrumentation, and control system strategy, based on the county Wastewater Treatment Division, Pump Station Design Guideline document. Instrumentation and control strategy will be defined through process and instrumentation diagrams (P&ID's) and preliminary process narratives. Present the analysis in a Technical Memorandum.
- 2.6 Development of architectural theme and low maintenance landscaping program for any above grade structures. Present the analysis in a Technical Memorandum.
- 2.7 Perform predesign for the preferred CSO facilities including facility lay out, profile, any necessary pipelines (size and materials), pumping systems, odor control and corrosion protection systems, mechanical systems, electrical systems, and emergency power systems. Identify utility conflicts. Determine the basis of design. The results of this work will be presented in a Technical Memorandum.
- 2.8 Risk analysis describing potential problems to cost and schedule that could result from differing site conditions, equipment delivery, adverse bidding environment, inability to obtain permits or rights-of-way, environmental compliance concerns, and similar construction risk factors. Define methods to minimize these risks. Risk analysis will be presented in a Technical Memorandum.
- 2.9 Preliminary final design and construction sequencing requirements and preliminary construction schedule, summarized in a Technical Memorandum.
- 2.10 Outline specifications based on Wastewater Treatment Division's Guide Specifications including a table of contents indicating proposed specification sections, a preliminary equipment list, and identification of any specification sections currently not included in the county standard specifications. Specifications shall be in the county's standard font (Arial 11). Wastewater Treatment Division uses SpecLink specifications.
- 2.11 Estimate Total Life Cycle cost for construction, operation and maintenance for the CSO facility based on the county established operating and maintenance cost information.
- 2.12 All Technical Memoranda will be presented to the county for review. The county will provide the consultant with written review comments. The consultant will incorporate county review comments and provide written response to King county comments. All revised and finalized Technical Memos will include county comments. All Tech Memos shall meet the county's Style Guide criteria.
- 2.13 Work with the county Art coordinator or artists to incorporate art with the facility.
- 2.14 Conduct a LEED evaluation for the CSO facility, including a LEED checklist. Prepare a LEED technical memo. (See Task 255).
- 2.15 If requested by the county, evaluate improvements to the existing South Magnolia wastewater facilities and the impacts to the Magnolia CSO facility.
- 3. Predesign Report.** The predesign report will consist of an executive summary and chapters discussing project issues (organized as chapters) regarding environmental

compliance, permitting, property and easement acquisition with strategies for appeals and/or condemnation, community relations, geo-technical investigations, survey and base mapping, engineering disciplines, and outline specifications. Prior to finalize the predesign study, the draft report shall submit to the county, the State Department of Ecology, and Federal agencies for review and comment.

4. **Independent Project Review.** The consultant shall assign reviewers independent of project team to perform design alternative validation review prior to finalizing the predesign work. Document and incorporate all comments to the final predesign report.

Deliverables:

- a. Attend and write meeting notes and action items for two four-hour workshops, two four-hour meetings, and five two-hour meetings.
- b. Draft and final predesign report. One bound hard copy, one unbound hard copy, and 30 electronic copies on CD in pdf format of both draft and final facility plan.
- c. Summary of review comments for the draft facility plan and consultant responses to comments.

Task 440 Magnolia Cost Estimating

Conduct a Total Life Cycle cost estimating for the alternative siting analysis and facility plan. Include both construction costs and operation and maintenance costs as described in task 205 and 235. Deliverables are described in task 205 and 235.

Task 445 Magnolia Property and Easement Acquisition Survey

The county may start property acquisition during the predesign phase of the project. This task includes survey work required to support the county's acquisition of property and easements. The consultant, using county examples, will prepare legal descriptions and exhibit maps for temporary and permanent easements for the Magnolia CSO facility site. Assume three utility easements and one CSO facility acquisition.

1. **Survey.** The county may acquire the property site for the Magnolia CSO Facility. It is therefore recommended that an American Land Title Association (ALTA) survey be performed. The ALTA survey will be performed to the Minimum Standard Detail Requirements as adopted by ALTA, American Congress on Surveying and Mapping ("ACSM"), and the National Society of Professional Surveyors in 1999. The ALTA survey will include a legal description and property corners will be set.
2. **Exhibit Maps.** The exhibit maps will include:
 - Parcel depiction with adjacent streets
 - Permanent and temporary easement location
 - Permanent and temporary easement dimension.
 - Permanent and temporary easement area.
 - Purpose of easement
 - Ownership name

Deliverables:

ALTA survey for one CSO facility site acquisition.

Legal descriptions and exhibit maps for required for up to three utility easements.

Task 450 Magnolia Property and Easement Acquisition Services

The county will lead the acquisition process. Under the county's direction, consultant shall provide services during the acquisition for one CSO facility site and three utility easements, as needed.

1. **Strategy Meetings.** Prepare for and attend two two-hour meetings to discuss property and easement acquisition strategies.
2. **Acquisition Service.** Consultant shall provide services for the acquisition of easements and fee purchases based on the county policies and guidelines. Using the county's approved title and appraisal companies, the consultant shall provide services for negotiation including Title Reports. Work includes:
 - Order preliminary title commitments for the Magnolia CSO facility site and easements,
 - obtain up to six Rights-of-Entry Agreements from property owners to support easement and CSO facility site design, geotechnical, ALTA survey, and environmental investigations,
 - coordinate and provide surveying and provide up to three legal descriptions, plan views, of properties and easements,
 - participate with six two-hour negotiations per site for the acquisition for necessary property rights,
 - prepare documents using county examples, policies and guidelines,
 - prepare documents in proper form for recordation and record documents if necessary,
 - facilitate closing, Escrow instructions, and prepare closing Binders, as requested,
 - provide services to the county PAO's legal review of the draft agreements,
 - prepare and maintain contact logs,
 - provide services for the county condemnation process, if needed, and
 - conduct Environmental Phase I and Phase II reports as requested for acquisitions.

***Note: King County will be responsible for the cost of property and easement purchase**

Deliverables:

- a. ~~Three~~ Four legal descriptions and plan views of properties and easements.
- b. Preliminary title commitments for storage site and easement sites.
- c. Obtain six rights-of-entry.
- d. Attend six two-hour negotiation sessions per site and prepare notes and action items.
- e. Prepare six property and easement transfer documents.
- f. Escrow instructions and closing binders.
- g. Attend two two-hour acquisition strategy meetings with county's project team.
- h. Phase I and Phase II environmental review on up to three (3) easement properties, one (1) CSO facility site.

Task 455 Magnolia Other Services

1. **Response to Review Comments.** The scope of work is based on a limited evaluation of CSO facility configurations, CSO facility sites, pipeline alignments, existing guide specifications and design standards. Additional analysis or a revision from current practices may be required in response to concerns raised by different project process, such as permit review, public comment, environmental review, elected officials, engineering reviews or other similar circumstances. The additional analysis or revision may increase the scope of predesign effort, plus associated work in surveying, geotechnical, environmental, community relations, permitting tasks, or predesign report tasks.

Deliverables:

- a. Project documentation for work products or written responses to support up to 50 comments or questions from public officials, permit agencies, environmental regulatory agencies, or the public.
- b. Tabulation of the county and other agencies review comments, the consultant response, and summary of resolutions.

- 2. Quality Assurance.** This task is to assure the quality of all work performed under the proposed contract, including coordinating and interfacing activities and deliverables. Develop and implement a QA/QC plan. The consultant shall assign reviewers independent of the project team to review all project deliverables. The quality task leader will coordinate the consultant review and response of all of the county comments. All comments will be incorporated into the documents or will be documented as to why comments are not included.

Deliverables:

- a. QA/QC plan (to be included in the Project plan).

- 3. Sustainable Building Practices.** In Keeping with the county's Green Building Initiative the consultant shall provide LEED (Leadership in Energy and Environmental Design) accredited design professionals as members of the design team. Green building principles, practices and materials (LEED) shall be incorporated into the predesign work of this contract for the Magnolia CSO facility.

Deliverables:

- a. Sustainable design: conduct one four-hour **charette** that produces the following:
 - b. List of LEED points to be targeted for the CSO facility.
 - c. Completed LEED Green Rating System Checklist (to be included in the predesign report) for the CSO facility.
 - d. Technical memorandum evaluating sustainable building practice alternatives and identification of opportunities for "green" practices (to be included in the predesign) for the CSO facility.
 - e. Meeting notes and action items.
- 4. King County Art Program.** The county Public Art Program may develop public artwork as an element of this project. If so, an artist will be retained under a separate contract, and the consultant shall work with the designated artist to integrate public art elements into the project. This task may only be used at the county's direction.

Deliverables

- a. Up to three two-hour meetings with artist.
- b. Art Integration Products if required.

- 5. Alternative Project Delivery Contracting.** Evaluate using up to three alternative project delivery methods for the Barton CSO facility. Prepare a technical memorandum describing the advantages and disadvantages of the alternative method for the project costs, schedule, and risk.

Deliverables:

- a. Draft and final Tech Memo for county review. Provide one bound hard copy, one unbound hard copy, and one electronic copy in pdf format on compact disk of both the draft and final memos.
- b. If requested by the county, draft a scope of work and project schedule for the alternative project delivery method.

- 6. Existing Facility Evaluation.** If requested by the county, evaluate improvements to existing county wastewater facilities upstream or downstream of the Magnolia CSO facility and the impacts to the CSO facility.

Deliverables:

- a. Draft and final Tech Memo for King county review. Provide one bound hard copy, one unbound hard copy, and one electronic copy in pdf format on compact disk of both the draft and final memos.

NORTH BEACH CSO PROJECT

Task 500 North Beach CSO Flow Analysis

Under this task, the consultant shall perform the following work:

1. **North Beach CSO Flow Analysis.** The county will calibrate recently collected flow data and incorporate it to the flow model to perform additional CSO flow analysis for the North Beach CSO Facility and will determine the size of the CSO facility. The consultant shall work with the county's flow modeling group. Review the county's CSO flow analysis, peak flows estimates, and CSO facility size determinations.
2. **Assess Impacts of Global Warming.** Assess the potential impacts of global warming on the sizing, hydraulics, and location of the CSO facility. This would include the effects global warming has on rainfall and on rising sea levels
3. **Project Team Meeting.** Hold up to two two-hour meetings with the county and others to discuss the county's CSO flow analysis, CSO facility capacity sizing, and an overview of the proposed North Beach CSO facility.

Deliverables:

- a. Attend up to two two-hour meetings. Distribute meeting notes and action items.

Task 505 North Beach CSO Project Alternative Development and Siting Evaluation

CSO Facility Development and Siting Evaluation. For the North Beach CSO facility, develop project alternatives and alternative facility sites. Alternatives shall include storage, improvements/upgrades to the existing pump station and forcemain, and other improvements in the drainage basin. Conduct an evaluation to identify and select a preferred CSO facility and site. Storage options would include both off-line and in-line CSO facilities. If requested by the county, evaluate improvements to existing North Beach wastewater facilities and the impacts to the North Beach CSO facility. Prepare a report describing the alternative facility and siting development process along with the development of criteria and an assessment of each alternative against the criteria. This assessment will lead to the selection of a preferred North Beach CSO facility and site. The evaluation shall include the ability to: (1) minimize public impacts acquiring property, (2) identify and secure initial permits and access rights for studies, as well as identifying all permanent property rights and permits to acquire, (3) minimize public impacts during construction and operation, (4) minimize environmental impacts, (5) minimize constructability impacts, (6) meet CSO program requirements, (7) estimate costs for land and easement acquisition, (8) address engineering issues, including geotechnical, and (9) minimize total life cycle costs. Prior to starting this work, the county will have worked with the community and developed policy siting criteria (community, technical, environmental, financial), detailed evaluation questions, and key factors (community, environmental and engineering) to guide the siting process.

1. **Alternative Selection Workshops.** Conduct up to three four-hour workshops with the county, public agencies, community stakeholders, and other interested parties to discuss and obtain input on alternatives.
2. **Planning Level Total Life Cycle Cost Estimates.** Provide planning level total life cycle costs estimates for the alternatives and the preferred CSO facility at each project location.
3. **Prepare a Siting Report detailing the work under this task.**

Deliverables:

- a. Draft and Final Siting Report for CSO facility development and site selection, including total life cycle cost estimates. Provide one bound hard copy, one unbound hard copy, and one electronic copy on compact disk, pdf format.
- b. Conduct three four-hour workshops and prepare notes of workshops.

Task 510 North Beach Environmental Compliance

The county is the designated State Environmental Policy Act (SEPA) lead agency for this project. The county will determine and conduct the appropriate environmental review, issue a project SEPA Threshold Determination, and release required notices and documents. The consultant will be required to provide services as necessary for the environmental review process and, if needed, the Endangered Species Act (ESA) Section 7 review process. The county is obtaining Washington State Water Pollution Control Revolving Fund (SRF) money for this project. This funding will require the county to produce a Facility Plan. In order for the Facility Plan to be approved by the State of Washington, the requirements of the State Environmental Review Process (SERP) must be completed. To complete SERP, the county must receive the Department of Ecology's (DOE) concurrence on all SEPA documents and the Environmental Information Document (EID). Services may include but not be limited to the following:

1. **Environmental Condition Assessments.** Identify existing environmental conditions including regulatory conditions that may influence siting, construction or operation. Identify potential adverse impacts upon the environment from the project and recommend appropriate mitigation measures. Environmental elements and issues may include wetlands, fisheries, noise, vegetation, traffic, and water quality, among others.
2. **Environmental Documentation.** Generate a memo documenting existing environmental conditions, potential environmental impacts and mitigation measures. This documentation could be used to evaluate the feasibility of the preferred CSO facility site and support the SEPA review.
3. **Attend Meetings.** Attend four two-hour meetings with WTD and regulatory agencies if needed.
4. **ESA Evaluation.** Assess potential for ESA Section 7 review of project elements by location and, if feasible, propose project modifications that could avoid the need for this review.
5. **ESA Documentation.** Prepare biological evaluation, biological assessment, or other documents to allow compliance with ESA if required.
6. **Environmental Information Document.** Provide services for completing the EID, including the Contact Source list, Initial Letter, Level of Assessment form, the Environmental Report (ER), and Agency Tracking Checklist.
7. **SERP and SEPA.** Provide services for completing SERP and SEPA.
8. **Phases I and II Environmental Assessments.** Perform Phase I Environmental Site Assessment in accordance with ASTM E 1527-05 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, to determine whether recognized environmental conditions are present at the preferred CSO facility sites. Conduct Phase II Environmental Assessments, if requested by the County.

Deliverables:

- a. Technical memorandum identifying existing conditions, potential impacts upon the environment and recommended mitigation measures.
- b. Reports for the SEPA review. Assume five reports at 20 pages each.
- c. Attend four two-hour meetings with WTD and regulatory agencies if needed.
- d. Meeting notes and action items.
- e. Report documenting ESA compliance, if required.

- f. Phases I and II Environmental Assessment reports.
- g. Environmental Information Document

Task 515 North Beach Permit Services

The county will procure permits for the project. The county will gather and summarize information on local, state, and federal permit requirements that may be used to evaluate the feasibility of CSO facility site alternatives. The county cannot make formal application for most permits until the project is in the 30 percent design level. During the predesign phase, the consultant's participation in permit services may include the tasks listed below.

1. **Permit Meetings.** Attend and/or provide services, if required, for six two-hour meetings with other agencies, which are arranged by the county to present project sites and receive agency comments. Prepare presentation materials as necessary for these meetings. Assume up to three boards and six drawings or sketches.
2. **Permit Identification.** After the preferred CSO facility sites have been defined, prepare a spreadsheet matrix listing all permits and agreements required for this project. Include statutory authority, submittal requirements, review process/schedule, and appeal procedures if applicable.
3. **Permit Application Documents.** Provide services to the county in starting to prepare local, state and federal permit applications, project narratives, drawings as well as responses to initial agency comments or requests for information, and provide needed revisions to applicable plans. Provide permit support for any required Section 404/401 applications using the Joint Aquatic Resource Permit (JARPA) Application. Assume 10 draft permit applications.
4. **Permit Required Property Rights.** Provide services to the county for coordination of property rights needed for specific permit applications.

Deliverables:

- a. Prepare documentation for initial permit applications, and respond to questions from permitting agencies in writing. The county will review response and submit updated versions to permit agencies. Assume 10 draft permit applications.
- b. Provide any needed wetland and wetland buffer delineation, wetland reports, sensitive areas mapping, or geological reports needed for permit submittals.
- c. Prepare for and attend six two-hour meetings with county and other permit agencies.
- d. Presentation materials: three boards and six drawings or sketches for meetings and facilitate meeting, if needed.
- e. Meeting notes and action items.

Task 520 North Beach Community Relations

The county's community relations staff will lead this effort for this contract. In addition, county staff will:

- maintain Web site,
- develop and issue all news releases (if needed), and
- coordinate communications with the local jurisdictions.

County will cover costs of mailing or delivery of fliers and meeting rooms (to be direct billed to county).

County graphics department, print shop, and sign shop will be used as needed.

The consultant's participation in community relations services may include the tasks listed below. All written materials and communications products are to be reviewed and approved by the county:

1. **Community Relations Plan (CRP).** Participate in developing a community relations plan in accordance with county public involvement guidelines. Identify target audiences, potential issues and concerns, and ways to inform and involve the community in the project. It will be updated as the project progresses.
2. **Community Issues Analysis.** Compile information that could be used to evaluate the feasibility of the preferred CSO facility sites. Support development of a community issues/input matrix to document and track public input.
3. **Attend Meetings.** Attend up to six two-hour meetings with the county project team as requested.
4. **Stakeholder Workshops.** Participate in planning, organizing and publicizing up to three four-hour stakeholder workshops. Prepare workshop materials, such as invitations, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend and facilitate workshops and prepare workshop summaries.
5. **24-hour project information line.** Monitor info line during geotechnical work. Prepare log summarizing questions and responses.
6. **Community Meetings.** Participate in planning, organizing and publicizing three four-hour community meetings. Prepare meeting materials, such as meeting announcements, sign-in sheets, signs, informational handouts, and posters or other visuals. Attend meetings and prepare meeting summaries. If requested, facilitate the meetings.
7. **Community Briefings.** Participate in up to three two-hour community group briefings. Participate in the scheduling, preparation of briefing materials, attend briefings and prepare written summaries. If requested, facilitate the briefings.
8. **Public Information Materials.** produce and coordinate distribution of up to 10 informational pieces.

Deliverables:

- a. Draft and final community relations plan.
- b. Attend six two-hour meetings with county's project team.
- c. Prepare materials for and attend three four stakeholder workshops. Provide workshop summaries.
- d. Prepare materials for and attend three four-hour community meetings. Provide meeting summaries.
- e. Prepare materials and summaries for up to three two-hour community briefings.
- f. Project informational pieces (up to 10). (Assume one page each with information on both sides).

Task 525 North Beach Geotechnical Investigations

Perform predesign level geotechnical investigation for the North Beach CSO facility. The consultant shall coordinate with the WTD geotechnical guidelines and reporting requirements. The University of Washington (UW) geologic database shall also be used by the consultant. The consultant will provide the following services:

1. **Geotechnical Investigation.** Perform geotechnical investigation, including the research, acquisition and review of existing available geotechnical, historical land use, photographs, and ground water data for projects completed at or in the vicinity of the alternatives and preferred sites for the North Beach CSO facility. Conduct a field investigation of surface geology.
2. **Technical Memorandum.** Prepare a technical memorandum detailing the results of the investigation for county review. The memorandum shall include a general discussion of the geology in the project area, available boring logs, ground water conditions, descriptions of problems in the area, areas that should be avoided during preliminary design and make preliminary recommendations for dewatering, for structures and pipelines. The report shall also recommend subsurface explorations for the preferred North Beach CSO facility site.

3. **Boring Application Documents.** Prepare all necessary documents and plans showing the test pits and boring locations for the application of required soil boring work permits.
4. **Soil Borings.** Conduct a series of exploration borings, soil testing to characterize foundation conditions and other engineering/construction conditions for structures and pipelines of the preferred North Beach CSO facility site. The subsurface exploration and testing shall be based on the recommendation identified during the geotechnical investigation and in compliance with WTD geotechnical Guidelines and reporting requirements. Assume for purposes of the proposal response:
 - three borings for pipelines averaging 25 feet deep,
 - three borings for preferred CSO facility site averaging 50 feet deep, and
 - the boring logs shall use the Metro Datum.
5. **Geotechnical Analysis.** Perform a more detail geotechnical analysis after borings are completed. Attend two two-hour meetings with county to review the analysis.
6. **Predesign Geotechnical Report.** Prepare a predesign geotechnical report for county review and comment. The predesign geotechnical report shall include preliminary recommendations for foundations of selected structures and pipelines, backfilling requirements for structure excavation, surface restoration, trenchless requirements, slope stability measures, erosion control measures, dewatering requirements, and other necessary engineering criteria. The report will include a discussion of seismic requirements for facilities and trench support requirements. Attend two two-hour meeting with county to review soil report recommendations.

Deliverables:

- a. Technical memorandum of initial geotechnical investigation results for review by the county. The county shall provide review comments and the consultant shall respond to the comments in writing.
- b. Plans showing test pits and boring locations for application of required permits for soil borings.
- c. Technical memorandum on subsurface exploration and testing for the county review.
- d. Predesign geotechnical report including all technical memorandum and plans. Provide draft report for King county review and comment. Provide final report in both electronic and hard copy format.
- e. Attend four two-hour meetings with county and meeting notes and action items.

Task 530 North Beach Survey and Mapping

Fieldwork, survey, preliminary base mapping information and related services will be needed for the alternative site analysis, preferred CSO facility site, pipelines, and predesign work. The consultant shall use the Metro Datum. Tasks may include, but are not limited to, the following

1. **Survey.** Establish horizontal and vertical controls. Conduct ground survey to collect data for all above and below ground fixed objects including the locations of all existing utilities and their ground and invert elevations, when possible. Provide property surveys for acquisition documents needed for recording. If needed, identify and pothole utility conflicts. All survey data will be placed on the preliminary base mapping. The consultant shall use the Metro Datum.
2. **Base Map.** Prepare preliminary base maps at one-foot contour interval and showing property lines, all above ground structures and underground utilities. These preliminary base maps will be used by the consultant for the alternative site analysis and Facility Plan. Additional survey and base mapping will be performed during the final design phase. The county will give the preliminary base maps produced during this predesign phase to the selected final design consultants for their use. Base maps shall use the Metro Datum. Base maps shall be at a scale of 1"=20' and shall be stamped by a Washington State registered surveyor.

Deliverables:

Base maps stamped by a Washington State registered surveyor in AutoCAD format on compact disk and as hard copy.

Task 535 North Beach CSO Facilities Plan

The consultant shall prepare a Facility Plan for the North Beach CSO facility. The Facility Plan shall satisfy the requirements of federal rule 40 CRF 35 and state WAC 173-240-060 and 173-245-050.

1. Meetings. Participate with the county in conducting the following meetings as part of the predesign process:

- 1.1 Facilitate one four-hour kick off workshop with county staff.
- 1.2 Facilitate one four-hour O&M meeting with operation and maintenance staff to determine O&M preferences and to address O&M issues.
- 1.3 Facilitate one four-hour meeting with county staff to identify potential design problems and design preferences
- 1.4 Attend one two-hour productivity initiative meeting to evaluate the feasibility of potential cost saving measures.
- 1.5 Facilitate one four-hour summary workshop with county staff to present the findings and recommendations of the draft Facility Plan and to solicit comments.

2. Predesign Analysis. Prepare a Facility Plan for the North Beach CSO facility, including the following elements:

- 2.1 Design criteria summarizing the performance requirements for mechanical and electrical equipment. Functional, space, and utility requirements for the CSO facility, including summary of design code requirements (code search) that impact the CSO facility configuration (Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, Washington State Energy Code, National Electric Code, local noise ordinances, and NFPA 820). Evaluation will establish seismic importance factor for the CSO facility. Prepare a Technical Memorandum describing this evaluation.
- 2.2 Hydraulic Design Parameters - Develop hydraulic design parameters. Make recommendations on the sizing of any pumping equipment, pump configuration, and pipelines. Prepare a Technical Memorandum describing the hydraulic design evaluation. The consultant shall use the Metro Datum.
- 2.3 Recommended an odor and corrosion control strategy for the CSO facility and associated structures. Present the analysis in a Technical Memorandum. Attend two two-hour meetings with the county's Odor Control Task Force to discuss and determine the odor and corrosion control strategy.
- 2.4 If needed, electrical service and possible standby engine generator description, summarizing requirements for establishing Seattle City Light electrical service to the CSO facility site, and describing the proposed engine generator system. Analysis will be presented in a Technical Memorandum.

- 2.5 Instrumentation, and control system strategy, based on the county's Wastewater Treatment Division, Pump Station Design Guideline document. Instrumentation and control strategy will be defined through process and instrumentation diagrams (P&ID's) and preliminary process narratives. Present the analysis in a Technical Memorandum.
- 2.6 Development of architectural theme and low maintenance landscaping program for any above grade structures. Present the analysis in a Technical Memorandum.
- 2.7 Perform predesign for the preferred CSO facilities including facility lay out, profile, any necessary pipelines (size and materials), pumping systems, odor control and corrosion protection systems, mechanical systems, electrical systems, and emergency power systems. Identify utility conflicts. Determine the basis of design. The results of this work will be presented in a Technical Memorandum.
- 2.8 Evaluate if the existing North Beach pump station and forcemain need to be upgraded and expanded to meet future capacity requirements, current building codes, and current county Pump Station Standards.
- 2.9 Risk analysis describing potential problems to cost and schedule that could result from differing site conditions, equipment delivery, adverse bidding environment, inability to obtain permits or rights-of-way, environmental compliance concerns, and similar construction risk factors. Define methods to minimize these risks. Risk analysis will be presented in a Technical Memorandum.
- 2.10 Preliminary final design and construction sequencing requirements and preliminary construction schedule, summarized in a Technical Memorandum.
- 2.11 Outline specifications based on Wastewater Treatment Division's Guide Specifications including a table of contents indicating proposed specification sections, a preliminary equipment list, and identification of any specification sections currently not included in the county standard specifications. Specifications shall be in the county's standard font (Arial 11). Wastewater Treatment Division uses SpecLink specifications.
- 2.12 Estimate Total Life Cycle cost for construction, operation and maintenance for the CSO facility based on the county established operating and maintenance cost information.
- 2.13 All Technical Memoranda will be presented to the county for review. The county will provide the consultant with written review comments. Provide written response to the county comments. Revised and finalized all Technical Memos in response to county comments. All Tech Memos shall meet the county's Style Guide criteria.
- 2.14 Work with county Art coordinator or artists to incorporate art with the facility.
- 2.15 Conduct a LEED evaluation for the CSO facility, including a LEED checklist. Prepare a LEED technical memo (See Task 255).
- 2.16 If requested by the county, evaluate improvements to the existing North Beach wastewater facilities and the impacts to the CSO facility.
- 3. Facility Plan.** Facility Plan will consist of an executive summary and chapters discussing project issues (organized as chapters) regarding environmental compliance, permitting, property and easement acquisition with strategies for appeals and/or condemnation,

community relations, geo-technical investigations, survey and base mapping, engineering disciplines, and outline specifications. Prior to finalize the predesign study, draft report shall submit to the county, the State Department of Ecology, and Federal agencies for review and comment. The Facility Plan shall satisfy the requirements of federal rule 40 CRF 35 and state WAC 173-240-060.

4. **Independent Project Review.** The consultant shall assign reviewers independent of project team to perform design alternative validation review prior to finalizing the predesign work. Document and incorporate all comments to the final predesign report.

Deliverables:

- a. Attend and write meeting notes and action items for two four-hour workshops, two four-hour meetings, and five two-hour meetings.
- b. Draft and final Facility Plan. One bound hard copy, one unbound hard copy, and 30 electronic copies on CD in pdf format of both draft and final facility plan.
- c. Summary of review comments for the draft facility plan and consultant responses to comments.

Task 540 North Beach Cost Estimating

Conduct a Total Life Cycle cost estimating for the alternative siting analysis and facility plan. Include both construction costs and operation and maintenance costs as described in task 505 and 535. Deliverables are described in task 505 and 535.

Task 545 North Beach Property and Easement Acquisition Survey

The county may start property acquisition during the predesign phase of the project. This task includes survey work required to support the county's acquisition of property and easements. The consultant, using county examples, will prepare legal descriptions and exhibit maps for temporary and permanent easements for the North Beach CSO facility site. Assume three utility easements and one CSO facility acquisition.

1. **Survey.** The county may acquire the property site for the North Beach CSO Facility. It is therefore recommended that an American Land Title Association (ALTA) survey be performed. The ALTA survey will be performed to the Minimum Standard Detail Requirements as adopted by ALTA, American Congress on Surveying and Mapping (ASCM), and the National Society of Professional Surveyors in 1999. The ALTA survey will include a legal description and property corners will be set.
2. **Exhibit Maps.** The exhibit maps will include:
 - parcel depiction with adjacent streets,
 - permanent and temporary easement location,
 - permanent and temporary easement dimensions,
 - permanent and temporary easement area,
 - purpose of easement, and
 - ownership name.

Deliverables:

- a. ALTA survey for one CSO facility site acquisition.
- b. Legal descriptions and exhibit maps for required for up to three utility easements.

Task 550 North Beach Property and Easement Acquisition Services

The county will lead the acquisition process. Under the county's direction, consultant shall provide services during the acquisition for one CSO facility site and three utility easements, as needed.

1. **Strategy Meetings.** Prepare for and attend two two-hour meetings to discuss property and easement acquisition strategies.
2. **Acquisition Services.** The consultant shall provide services for the acquisition of easements and fee purchases based on county Policies and Guidelines. Using county approved title and appraisal companies, the consultant shall provide services for negotiation including Title Reports. Work includes:
 - order preliminary title commitments for the North Beach CSO facility site and easements,
 - obtain up to six Rights-of-Entry Agreements from property owners to support easement and CSO facility site design, geotechnical, ALTA survey, and environmental investigations,
 - coordinate and provide surveying and provide up to three legal descriptions, plan views, of properties and easements,
 - participate with six two-hour negotiations per site for the acquisition for necessary property rights,
 - prepare documents using county examples, policies and guidelines.
 - prepare documents in proper form for recordation and record documents if necessary,
 - facilitate Closing, Escrow instructions, and prepare Closing Binders, as requested.
 - provide services to the county PAO's legal review of the draft agreements,
 - prepare and maintain contact logs,
 - provide services for the county condemnation process, if needed, and
 - conduct Environmental Phase I and Phase II reports as requested for acquisitions.

***King County will be responsible for the cost of property and easement purchase**

Deliverables:

- a. ~~Three~~ Four legal descriptions and plan views of properties and easements.
- b. Preliminary Title Commitments for Storage Site and easement sites.
- c. Obtain six rights-of-entry.
- d. Attend six two-hour negotiation sessions per site and prepare notes and action items.
- e. Prepare six property and easement transfer documents.
- f. Escrow instructions and closing binders.
- g. Attend two two-hour acquisition strategy meetings with county's project team.
- h. Phase I and Phase II environmental review on up to three easement properties, one CSO facility site.

Task 555 North Beach Other Services

1. **Response to Review Comments.** The scope of work is based on a limited evaluation of CSO facility configurations, CSO facility sites, pipeline alignments, existing guide specifications and design standards. Additional analysis or a revision from current practices may be required in response to concerns raised by different project process, such as permit review, public comment, environmental review, elected officials, engineering reviews or other similar circumstances. The additional analysis or revision may increase the scope of predesign effort, plus associated work in surveying, geotechnical, environmental, community relations, permitting tasks, or Facility Plan tasks.

Deliverables:

- a. Project documentation for work products or written responses to support up to 50 comments or questions from public officials, permit agencies, environmental regulatory agencies, or the public.

- b. Tabulation of the county and other agencies review comments, the consultant response, and summary of resolutions.
2. **Quality Assurance.** This task is to assure the quality of all work performed under the proposed contract, including coordinating and interfacing activities and deliverables. Develop and implement a QA/QC plan. The consultant shall assign reviewers independent of the project team to review all project deliverables. The quality task leader will coordinate the consultant review and response of all of the county comments. All comments will be incorporated into the documents or will be documented as to why comments are not included.

Deliverables:

- a. QA/QC plan (to be included in the project plan).
3. **Sustainable Building Practices.** In Keeping with the county's Green Building Initiative the consultant shall provide LEED (Leadership in Energy and Environmental Design) accredited design professionals as members of the design team. Green building principles, practices and materials (LEED) shall be incorporated into the predesign work of this contract for the North Beach CSO facility.

Deliverables:

- a. Sustainable design: conduct one four-hour **charette** that produces the following:
 - List of LEED points to be targeted for the CSO facility.
- b. Completed LEED Green Rating System Checklist (to be included in the Facility Plan) for the CSO facility.
- c. Technical memorandum evaluating sustainable building practice alternatives and identification of opportunities for "green" practices (to be included in the Facility Plan) for the CSO facility.
- d. Meeting notes and action items.
4. **King County Art Program.** The county Public Art Program may develop public artwork as an element of this project. If so, an artist will be retained under a separate contract, and the consultant shall work with the designated artist to integrate public art elements into the project. This task may only be used at the county's direction.

Deliverables

- a. Up to three two-hour meetings with artist.
- b. Art Integration Products if required.
5. **Alternative Project Delivery Contracting.** Evaluate using up to three alternative project delivery methods for the Barton CSO facility. Prepare a technical memorandum describing the advantages and disadvantages of the alternative method for the project costs, schedule, and risk.

Deliverables:

- a. Draft and final Tech Memo for county review. Provide one bound hard copy, one unbound hard copy, and one electronic copy in pdf format on compact disk of both the draft and final memos.
- b. If requested by the county, draft a scope of work and project schedule for the alternative project delivery method.

- 6. Existing Facility Evaluation.** If requested by the county, evaluate improvements to existing county wastewater facilities upstream or downstream of the North Beach CSO facility and the impacts on the CSO facility.

Deliverables:

- a. Draft and final Tech Memo for county review. Provide one bound hard copy, one unbound hard copy, and one electronic copy in pdf format on compact disk of both the draft and final memos.

Anticipated Contract Schedule:

January 2007 – April 2009

PHASES / TASKS / SUBTASKS					FIRMS & STAFF	
Phase or Task #	Task or Subtask #	PHASES / TASKS / SUBTASKS TITLES	% of Total Labor Hours	Total Hours All Firms		

#	100	Project Management				
			0%	0		
		Subtotal	0%	0		

#	#	Barton CSO Project				
	200, 205	Barton CSO Flow Analysis, Alternative Development & Siting Evaluation	0%	0		
	210.00	Barton Environmental Compliance	0%	0		
	215, 245, 250	Barton Permit Services, Property & Easement Acquisition	0%	0		
	220.00	Barton Community Relations	0%	0		
	225, 230	Barton Geotechnical Investigations, Survey & Mapping	0%	0		
	235.00	Barton CSO Facilities Plan	0%	0		
	240.00	Barton Cost Estimating	0%	0		
	255.00	Barton Other Services	0%	0		
		Subtotal	0%	0		

#	#	Murray CSO Project				
	300, 305	Murray CSO Flow Analysis, Alternative Development & siting Evaluation	0%	0		
	310.00	Murray Environmental Compliance	0%	0		
	315, 345, 350	Murray Permit Services, Property & Easement Acquisition	0%	0		
	320.00	Murray Community Relations	0%	0		
	325, 330	Murray Geotechnical Investigations, Survey & Mapping	0%	0		
	335.00	Murray CSO Facilities Plan	0%	0		
	340.00	Murray Cost Estimating	0%	0		
	355.00	Murray Other Services	0%	0		
		Subtotal	0%	0		

#	#	Magnolia CSO Project				
	400, 405	Magnolia CSO Flow Analysis, Alternative Development & Siting Evaluation	0%	0		
	410.00	Magnolia Environmental Compliance	0%	0		
	415, 445, 450	Magnolia Permit Services, Property & Easement Acquisition	0%	0		
	420.00	Magnolia Community Relations	0%	0		
	425, 430	Magnolia Geotechnical Investigations, Survey & Mapping	0%	0		
	435.00	Magnolia CSO Pre-design Report	0%	0		
	440.00	Magnolia Cost Estimating	0%	0		
	455.00	Magnolia Other Services	0%	0		
		Subtotal	0%	0		

#	#	North Beach CSO Project				
	500, 505	North Beach CSO Flow Analysis, Alternative Development & Siting Evaluation	0%	0		
	510.00	North Beach Environmental Compliance	0%	0		
	515, 545, 550	North Beach Permit Service, Property & Easement Acquisition	0%	0		
	520.00	North Beach Community Relations	0%	0		
	525, 530	North Beach Geotechnical Investigations, Survey & Mapping	0%	0		
	535.00	North Beach CSO Facilities Plan	0%	0		
	540.00	North Beach Cost Estimating	0%	0		
	555.00	North Beach Other Services	0%	0		
		Subtotal	0%	0		

TOTAL			0%	0		
Reflects total hours. Does not reflect the Total Price.						

PRIME'S Name	Principal	Proj Mgr.	Design Engineer	Permit/Right of Way Specialist	Community Relations	Environmental Compliance	Others	SUB #1's Name	Title	Engineer	Specialist	Others	SUB #2's Name	Title	Engineer	Specialist	Others	SUB #3's Name	Title	Engineer	Specialist	Others
Prime's Total Labor Hours	Name (professional staff only)	Name	Name	Name	Name	Name	Name	SUB #1's Total Labor Hours	Name (professional staff only)	Name	Name	Name	SUB #2's Total Labor Hours	Name (professional staff only)	Name	Name	Name	SUB #3's Total Labor Hours	Name (professional staff only)	Name	Name	Name
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